NOTICES OF FINAL RULEMAKING

The Administrative Procedure Act requires the publication of the final rules of the state's agencies. Final rules are those which have appeared in the *Register* first as proposed rules and have been through the formal rulemaking process including approval by the Governor's Regulatory Review Council or the Attorney General. The Secretary of State shall publish the notice along with the Preamble and the full text in the next available issue of the *Register* after the final rules have been submitted for filing and publication.

NOTICE OF FINAL RULEMAKING

TITLE 2. ADMINISTRATION

CHAPTER 2. ARIZONA COMMISSION ON THE ARTS

PREAMBLE

1. Sections Affected **Rulemaking Action**

R2-2-101	Amend
R2-2-102	Amend

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statute: A.R.S. § 41-986

Implementing statute: A.R.S. § 41-986

3. The effective date of the rules:

July 15, 2002

4. A list of all previous notices appearing in the Register addressing the final rules:

Notice of Rulemaking Docket Opening: 8 A.A.R. 854, March 1, 2002

Notice of Proposed Rulemaking: 8 A.A.R. 1590, April 5, 2002

Notice of Public Hearing on Proposed Rulemaking: 8 A.A.R. 1740, April 5, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Mollie Lakin-Hayes

Address: 417 W. Roosevelt
Phoenix, AZ 85003

Telephone: (602) 229-8220

Fax: (602) 256-0282

E-mail: mlakinhayes@ArizonaArts.org

6. An explanation of the rules, including the agency's reasons for initiating the rules:

Upon the recommendation of the Office of the Auditor General, the revised R2-2-102 amends the distinction between private monies that will be considered as a match to the Arizona Arts Endowment Fund (known as Arizona ArtShare) and other private monies that will not be considered as a match, and describes the manner of reporting both non-designated and designated donations to arts endowments.

7. A reference to any study that the agency relied on in its evaluation of or justification for the final rules and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

Not applicable

8. A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

The proposed rules amendment is a technical language change, and the change will have minimal or no impact on state agencies, specific public entities (educational institutions, cities and counties), private entities (specifically community foundations), private donors, non-profit arts organizations, small businesses or consumers.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

One language change was made:

In R2-2-102(A)(2), the Commission changed the words "contracted by" to "contracting with".

Minor grammatical or clarifying changes were made at the request of G.R.R.C. staff.

11. A summary of the principal comments and the agency response to them:

The Commission received no comments.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

None

13. Incorporations by reference and their location in the rules:

None

14. Were these rules previously made as emergency rules?

No

15. The full text of the rules follows:

TITLE 2. ADMINISTRATION

CHAPTER 2. ARIZONA COMMISSION ON THE ARTS

ARTICLE 1. MATCHING PRIVATE MONIES WITH MONIES FROM THE ARIZONA ARTS ENDOWMENT FUND

Section
R2-2-101. Definitions
R2-2-102. Matching Private Monies

ARTICLE 1. MATCHING PRIVATE MONIES WITH MONIES FROM THE ARIZONA ARTS ENDOWMENT FUND

R2-2-101. Definitions

In this Article, unless the context otherwise requires:

"Arizona Arts Endowment Fund" means the fund established in A.R.S. § 41-986.

"Arts Organization" means an organization that has applied for and received non-profit status under 501(c)(3) of the U.S. internal revenue code and whose primary mission is to produce, present, or serve the arts.

"Commission" means the Arizona Commission on the Arts.

"Donor-advised Fund" means monies donated to a community foundation, over which the donor or others designated by the donor retain the right to advise on grants from the fund.

"Field-of-interest for the arts Fund" means monies donated to a community foundation, that the donor restricts to grants in a specific charitable field.

~~"Large and Mid-Sized Arts Organizations" - means non-profit Arizona arts organizations currently participating in Organization Development Program Level III, Basic Aid or Locals Aid grants programs of the Arizona Commission on the Arts.~~

~~"Matching Funds" means non-state monies collected which can be considered a match to the Arizona Arts Endowment Fund. These include monies considered "Other Government Endowment for the Arts" and "Private Monies."~~

"Non-designated Funds" means monies donated or appropriated to the Arizona Arts Endowment Fund, or to an endowment fund for which income generated is to be administered by the Commission for arts programs in Arizona.

"Other Government Endowment for the Arts" means an endowment of a community college, university, city or county local arts agency.

"Private Monies" means revenue from sources other than state tax funds such as cash or securities, irrevocable deferred gifts, lead trusts, real estate, or other items that are convertible to cash. The cash value of an irrevocable deferred gift is its present value.

"Programs" means arts activities or presentations ~~which~~ that are promoted to the public.

~~"Tangible Personal Property" means an item under personal ownership that can be touched or felt, such as a car, boat, artwork, and jewelry.~~

R2-2-102. Matching Private Monies

A. The Commission shall consider private monies to be a match to the Arizona Arts Endowment Fund if the private monies are contributed as follows:
1. The donor enters into a written agreement with an endowment fund to dedicate the monies permanently; and
2. The donor designates the monies to the Arizona Arts Endowment Fund or to the ~~an~~ endowment fund of a 501(c)(3) ~~arts~~ community organization contracting with the Arizona Commission on the Arts to administer the monies~~;~~.
3. ~~The donor designates the monies to the endowment fund of an arts organization, except as provided in subsection (B); or~~
4. ~~The donor designates the monies to another government endowment fund for the arts that agrees to:~~
   a. ~~Re-grant monies to arts programs, and~~
   b. ~~Use none of the monies to support for-credit classes.~~

B. The Commission shall not consider a donation to be a match to the Arizona Arts Endowment Fund if ~~the donation is to an arts organization and~~:
1. ~~Is tangible personal property; or~~ The donor designates the monies to a specific arts organization's endowment fund, or
2. ~~Is intended for use by the arts organization for its annual operating budget.~~ The donor designates the monies to another government endowment fund for the arts.

C. The Commission shall consider monies in a donor-advised fund or a field-of-interest for the arts fund the same as all other monies donated in compliance with subsection (A).

D. Funds may be held, accounted for, and named individually.

E. The Commission may enter into written agreements with ~~1~~ one or more 501(c)(3) community organizations to collect, invest, and manage private monies. The contracted organization shall report, on a quarterly basis, the collection of, investment of, and return on ~~such~~ the monies, to the Commission.

F. The Commission shall ~~require~~ request annual written financial reports from non-profit arts organizations in Arizona ~~receiving monies from the Commission~~. ~~The reports~~ Each report shall include a statement of the amount of monies received by ~~any~~ an endowment for the arts of the reporting non-profit arts organizations ~~which may be matching funds~~. The Commission shall annually document and report these gifts to arts endowments to the Legislature in addition to reporting non-designated funds.

NOTICE OF FINAL RULEMAKING

TITLE 4. PROFESSIONS AND OCCUPATIONS

CHAPTER 7. BOARD OF CHIROPRACTIC EXAMINERS

PREAMBLE

1. Sections Affected — **Rulemaking Action**

R4-7-1001	Amend
R4-7-1003	Amend

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statute: A.R.S. § 32-904(B)(2)

Implementing statute: A.R.S. § 32-926

3. The effective date of the rules:

July 17, 2002

4. A list of all previous notices appearing in the Register addressing the final rule:

Notice of Rulemaking Docket Opening: 7 A.A.R. 2082, May 18, 2001

Notice of Proposed Rulemaking: 7 A.A.R. 3016, July 13, 2001

Notice of Public Information: 8 A.A.R. 856, March 1, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Patrice A. Pritzl, Executive Director

Address: 5060 N. 19th Avenue, Suite 416
Phoenix, AZ 85015

Telephone: (602) 864-5088

Fax: (602) 864-5099

6. An explanation of the rule, including the agency's reasons for initiating the rule:

The proposed rule amendments will further clarify the law pertaining to preceptor program participants. The first amendment will add a question to the application regarding convictions, sanctions, or investigations. The second amendment will clarify that the fee is non-refundable. The third will clarify that a student may remain in the program up to six months or upon taking the National Board of Chiropractic Examiners Part IV exam.

7. A reference to any study that the agency relied on in its evaluation of or justification for the final rule and where the public may obtain or review the study, all data underlying each study, any analysis of the study, and other supporting material:

Not applicable

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

The economic impact is minor. The proposed amendments to R4-7-1001 and R4-7-1003 are technical in nature and will provide clarification of existing law. The amendments should not have any economic impact. The law already precludes participation in the preceptor program for applicants with a disciplinary history or under investigation for a violation of law; the agency has had only one instance of a requested refund on the $75.00 fee; and externs are already precluded from participation in the program for more than six months following graduation.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

The only changes to the rule are technical and grammatical changes suggested by G.R.R.C. staff.

11. A summary of the principal comments and the agency response to them:

The agency did not receive written or oral comment.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rules:

None

14. Was this rule previously adopted as an emergency rule?

No

15. The full text of the rules follows:

TITLE 4. PROFESSIONS AND OCCUPATIONS

CHAPTER 7. BOARD OF CHIROPRACTIC EXAMINERS

ARTICLE 10. PRECEPTORSHIP TRAINING PROGRAM

Section

ARTICLE 10. PRECEPTORSHIP TRAINING PROGRAM

R4-7-1001. Eligibility; Application

A. Both extern and preceptor shall submit a written application to the Board for approval of participation in a preceptor training program. The Board shall process the application within the time-frames provided in R4-7-502(J).
  1. The application shall be submitted on a form that contains:
     a. The extern's photo;
     b. The extern's and preceptor's names, addresses, telephone numbers, and any other names of the extern or preceptor;
     c. The preceptor's license number, number of years in practice, and disciplinary history;
     d. A waiver of confidentiality under subsection (B)(2) and notarized signature from both the extern and preceptor;
     e. The beginning and ending date of the program;
     f. Location, days, and hours of the ~~proposed~~ program;
     g. The name and contact number for the ~~sponsoring~~ college sponsoring the preceptorship program under subsection (B)(1);
     h. The date of extern graduation from a chiropractic college and identification of the proposed scope of the program for which the application is being submitted and the eligibility of the applicants for approval.
  2. The application shall require the extern and the preceptor to disclose any convictions or sanctions and whether the extern or preceptor is currently under investigation for a violation of criminal or administrative law.

B. Except as provided in subsection (D), the Board ~~may~~ shall approve participation by an extern who does not come under subsection (C) and who:
  1. Concurrently participates in an undergraduate or postgraduate preceptorship program offered by an accredited chiropractic college and provides verifiable proof of enrollment;
  2. Submits a written waiver of confidentiality that permits the Board access to any information, records, or documentation collected or used by the college to evaluate the extern's eligibility for or performance in the program;
  3. Provides a certificate of attainment on Parts I and II of the examination by the National Board of Chiropractic Examiners;
  4. Successfully completes and provides documentation of the coursework required by A.R.S. § 32-922.02 for practice of chiropractic specialties, if specialties are to be included in the training program; and
  5. Submits the $75.00 filing fee, which is non-refundable except if A.R.S. § 41-1077 applies.

C. The Board shall not approve participation for an extern who:
  1. Has been the subject of disciplinary sanction or convicted of a felony or misdemeanor involving moral turpitude~~.~~;
  2. Is currently under investigation for a licensing violation, or a felony or misdemeanor involving moral turpitude~~.~~;
  3. Fails to demonstrate good character and reputation~~.~~;
  4. Fails to demonstrate the physical and mental ability to practice chiropractic skillfully and safely~~.~~; or
  5. Has practiced chiropractic without a license or through participation in an approved preceptor program.

D. The Board ~~may~~ shall approve participation for a preceptor who:
  1. Concurrently participates as a preceptor at the chiropractic college in which the extern is enrolled throughout the time period of the preceptor program and provides verifiable proof of participation;
  2. Submits a written waiver of confidentiality that permits the Board access to any information, records, or documentation collected or used by the college to evaluate the preceptor's eligibility for or performance in the program; and
  3. Is continuously licensed in Arizona for at least ~~5~~ five years ~~preceding~~ before the date the program is to begin and, if the program is to include practice of chiropractic specialties, is certified in those specialties for at least ~~3~~ three years ~~preceding~~ before the date upon which the program is to begin; and

E. The Board shall not approve participation for a preceptor who:
  1. Has been the subject of disciplinary sanction or convicted of a felony or a misdemeanor involving moral turpitude~~.~~;
  2. Is currently under investigation for a licensing violation, felony, or misdemeanor involving moral turpitude~~.~~;
  3. Fails to demonstrate good character and reputation~~.~~; ~~and~~ or
  4. Fails to demonstrate the physical and mental ability to practice chiropractic skillfully and safely.

R4-7-1003. Regulation and Termination of the Preceptorship Program

A. The Board, on its own initiative or upon receipt of a complaint, may investigate conduct of an extern or preceptor occurring within the program for compliance with ~~these rules~~ this Chapter and A.R.S. § 32-924. The Board may, pursuant to A.R.S. § 32-929, obtain patient records as part of the investigation.

B. If after investigation, the Board determines that the conduct of the extern or preceptor imperatively requires emergency action, the Board shall suspend approval of the program pending proceedings for termination or other action. The Board shall promptly notify the extern, the preceptor, and the college of the suspension, the reasons for the suspension, and the conditions under which the suspension may be lifted, if any.

C. If after a hearing, the Board determines that the conduct of the preceptor or the extern ~~constituted~~ constitutes a violation of ~~these rules~~ this Chapter or A.R.S. § 32-924, the Board shall terminate the program and may sanction the preceptor or deny licensure to the extern if the extern has applied for a license.

D. If the Board receives written verification from a chiropractic college that the extern or preceptor is no longer concurrently participating in the associated chiropractic college program, the Board shall terminate approval of the extern's training program.

E. An extern may participate in a preceptorship program until the results of the next scheduled Part IV of the National Board of Chiropractic Examiners examination are released or for ~~6~~ six months immediately following the extern's date of graduation from chiropractic college, whichever occurs first.

NOTICE OF FINAL RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 1. DEPARTMENT OF HEALTH SERVICES ADMINISTRATION

PREAMBLE

1. Sections Affected	Rulemaking Action
R9-1-101	Amend
R9-1-102	Repeal
R9-1-102	New Section
R9-1-103	Repeal
R9-1-103	New Section
R9-1-104	Repeal
R9-1-105	Repeal
R9-1-106	Repeal
R9-1-107	Repeal
R9-1-108	Repeal
R9-1-109	Repeal
R9-1-110	Repeal
R9-1-111	Repeal
R9-1-112	Repeal
R9-1-113	Repeal
R9-1-114	Repeal
R9-1-115	Repeal
R9-1-116	Repeal
R9-1-117	Repeal
R9-1-118	Repeal
R9-1-119	Repeal
R9-1-120	Repeal
R9-1-121	Repeal
R9-1-201	Repeal
R9-1-201	New Section
R9-1-202	Repeal
R9-1-202	New Section
R9-1-203	Repeal
R9-1-203	New Section
R9-1-204	Repeal
R9-1-205	Repeal
R9-1-206	Repeal
Article 3	Amend
R9-1-311	Amend
R9-1-312	Amend
R9-1-313	Repeal
R9-1-314	Repeal
R9-1-315	Repeal

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 36-104(3), 36-136(A)(4), 36-136(F), and 41-1003

Implementing statutes: A.R.S. §§ 36-107, 41-1029, 41-1033, 41-1092.08, and 41-1092.09

3. The effective date of the rules:

July 15, 2002

4. A list of all previous notices appearing in the Register addressing the final rules:

Notice of Rulemaking Docket Opening: 8 A.A.R. 621, February 8, 2002

Notice of Proposed Rulemaking: 8 A.A.R. 688, February 22, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name:	Kathleen Phillips Rules Administrator
Address:	Arizona Department of Health Services 1740 W. Adams, Room 102 Phoenix, AZ 85007
Telephone:	(602) 542-1264
Fax:	(602) 364-1150
E-mail:	kphilli@hs.state.az.us

6. An explanation of the rules, including the agency's reason for initiating the rules:

The Department completed a five-year review of these rules and the five-year review report was approved by the Governor's Regulatory Review Council on September 14, 1999. This rulemaking addresses the issues identified in that five-year review report that require initiating a rule package for Articles 1, 2 and 3. In Article 1, the Department will repeal R9-1-102 through R9-1-117, R9-1-119, and R9-1-121 because the Department no longer has statutory authority to hold hearings. The Legislature has granted that authority to the Office of Administrative Hearings, under A.R.S. § 41-1092.01. The Department will also amend R9-1-101, repeal R9-1-118 and R9-1-120, and will add two new Sections. One new Section will contain criteria for parties to follow if they wish to object to the decision on an appealable agency action made by an administrative law judge. In the second new Section, the Department will provide criteria for those parties to follow who wish to request a review or rehearing of that decision. The new Sections will comply with current statutes and conform to current rulemaking format and style requirements. In Article 2 the Department will repeal R9-1-201 through R9-1-206 and add three new Sections that:

1. Provide definitions for the Section,
2. Identify the location and viewing time of rulemaking records, and
3. Specify how to prepare a petition for a new or existing rule.

This information is in the current rules, but extensive changes need to be made to the language in order to conform to current rulemaking format and style requirements. In Article 3, the Department will repeal R9-1-311, R9-1-312, and R9-1-314, and will add two new Sections that provide definitions, and specify under what circumstances and for what purposes the Department may release medical information. Finally, the Department will repeal R9-1-313 and R9-1-315, as they contain information that is not properly contained in rules.

7. A reference to any study that the agency relied on its evaluation of or justification for the rules and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

Not applicable

8. A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

As used in this summary, "minimal" economic impact means less than $1,000 per year, "moderate" means between $1,000 and $10,000 per year, and "substantial" means greater than $10,000 per year.

The Department will bear moderate costs for promulgating and enforcing the rules. Costs for promulgating the rules include staff time to write, review, and direct the rules through the rulemaking process. The cost of enforcing the rules is not expected to be any different than before the rulemaking. The majority of the rules in Article 1 are being repealed because the Department no longer has statutory authority to hold hearings. The substance of the two new rules come from R9-1-118 and R9-1-120, but have been redrafted to reflect statutory changes and to be clear, concise, and understandable. The new rules in Article 2 also contain the same information that was previously in Article 2, but

reflect statutory changes, and have been reworded to be clear, concise and understandable. Most of the language that was previously in Article 3 has been removed because it was not regulatory language. The new rule in Article 3 includes the same information that was previously in R9-1-314, but has been redrafted to be clear, concise, and understandable.

Therefore, the Department will not be enforcing any new regulations and there should be no additional costs.

There is no economic impact to large or small businesses by the amendments.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

The Department made the following minor technical and grammatical changes:

1. In the table of contents, the title for R9-1-312, "Information Which May be Disclosed" was changed to "Disclosure of a Medical Record" to reflect the actual title of R9-1-312;
2. In R9-1-101(B)(6) the unnecessary language "within 20 days after a hearing" was removed;
3. In R9-1-103(C)(7), the word "findings" was changed to "finding";
4. In R9-1-203(C), the word "that" was changed to "who";
5. R9-1-204 is repealed, based on recently passed legislation, Chapter 334, Section 8 (SB 1339), signed by the Governor on May 22, 2002.
6. In R9-1-311 a definition for the term "incompetent" was added to clarify its meaning as it is used in R9-1-312.

Additional technical and grammatical changes were made based on suggestions from the Governor's Regulatory Review Council staff. The Department has not made any substantial change in the text of the final rules from that in the proposed rules.

11. A summary of the principal comments and the agency response to them:

The Department did not receive any written or oral comments.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rules:

None

14. Was this rule previously adopted as an emergency rule?

No

15. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

CHAPTER 1. DEPARTMENT OF HEALTH SERVICES ADMINISTRATION

Section

R9-1-101. Definitions
R9-1-102. ~~Initiation of a hearing~~ Objection to a Recommended Decision
R9-1-103. ~~Denial of a request for hearing~~ Rehearing or Review of a Final Administrative Decision
R9-1-104. ~~Hearing officer; disqualification; substitution~~ Repealed
R9-1-105. ~~Communications regarding matters related to a contested hearing~~ Repealed
R9-1-106. ~~Representation~~ Repealed
R9-1-107. ~~Notice of hearing or prehearing conference~~ Repealed
R9-1-108. ~~Prehearing conference, procedure and prehearing order~~ Repealed
R9-1-109. ~~Pleadings, briefs, motions~~ Repealed
R9-1-110. ~~Filing; computation of time; extension of time~~ Repealed
R9-1-111. ~~Record of hearings~~ Repealed
R9-1-112. ~~Service; proof of service~~ Repealed
R9-1-113. ~~Default~~ Repealed
R9-1-114. ~~Intervention~~ Repealed
R9-1-115. ~~Subpoenas~~ Repealed
R9-1-116. ~~Procedure at hearing~~ Repealed
R9-1-117. ~~Evidence~~ Repealed
R9-1-118. ~~Recommended decision; Director's decision~~ Repealed

ARTICLE 2. PUBLIC PARTICIPATION IN RULEMAKING

ARTICLE 3. DISCLOSURE OF ~~INFORMATION AND~~ MEDICAL RECORDS

ARTICLE 1. RULES OF PRACTICE AND PROCEDURE

R9-1-101. Definitions

A. In this ~~Article~~ Chapter, unless ~~the context~~ otherwise ~~requires~~ specified:

1. ~~"Attorney General" means the Attorney General of the state of Arizona and his designees.~~ "Day" means a calendar day, and excludes the:
   a. Day of the act or event from which a designated period of time begins to run; and
   b. Last day of the period if a Saturday, Sunday, or official state holiday.
2. ~~"Complaint" means a formal written charge, brought by the Department after investigation, inspection or review to initiate formal proceedings.~~
3.2. "Department" means the Arizona Department of Health Services.
4.3. "Director" means the Director of the Arizona Department of Health Services or ~~his designees~~ an individual designated by the Director.
4. "Rule" has the same meaning as in A.R.S. § 41-1001(17).
5. ~~"Hearing officer" means an individual appointed by the Director pursuant to A.R.S. § 36-112(A) to conduct hearings or other proceedings.~~
6. ~~"Interested person" means any individual or organization permitted by statute or rule to make a statement at a hearing but lacking sufficient interest to be admitted as a party.~~
7. ~~"Party" means each person or agency named or admitted as a party or properly seeking and entitled as of right to be admitted as a party.~~

B. In this Article, unless otherwise specified:

1. "Administrative law judge" has the same meaning as in A.R.S. § 41-1092.
2. "Appealable agency action" has the same meaning as in A.R.S. § 41-1092.
3. "Contested case" has the same meaning as in A.R.S. § 41-1001.
4. "Final administrative decision" has the same meaning as in A.R.S. § 41-1092.
5. "Party" has the same meaning as in A.R.S. § 41-1001.
6. "Recommended decision" means the written ruling made by an administrative law judge regarding a contested case or appealable agency action within 20 days after a hearing under A.R.S. § 41-1092.07

R9-1-102. ~~Initiation of a hearing~~ Objection to a Recommended Decision

~~A.~~ ~~A hearing may be initiated only by the Department or by a person whose legal rights, duties, or privileges are required by statute, rule or as otherwise provided by law to be determined after an opportunity for a hearing.~~

~~B.~~ ~~A hearing shall be initiated in the manner provided by the statute or rule authorizing the hearing.~~

1. ~~When a hearing is initiated by a request for hearing served upon the Department, the request for hearing shall be in writing and shall clearly cite:~~
   a. ~~The specific actions of the Department which are the basis of the hearing request; and~~
   b. ~~The statute or rule entitling the person to a hearing.~~
2. ~~Whenever the Department initiates a hearing, the Director shall serve a copy of the notice of proceedings on the named parties. The notice shall comply with A.R.S. § 41-1061(B) and shall be signed by the Director.~~

A. Upon receipt of a copy of a recommended decision for a contested case or an appealable agency action, the Director may mail a copy of the recommended decision to each party.

B. A party has ten days from the date the Director mails the recommended decision to submit a memorandum of objections that states each reason why the recommended decision is in error, with information supporting the reason.

C. The Director may consider the memorandum of objections in determining whether to accept, reject, or modify the recommended decision.

R9-1-103. ~~Denial of request for hearing~~ Rehearing or Review of a Final Administrative Decision

~~If the Director denies the request for hearing, the Department shall provide to the applicant a written copy of the decision stating the reasons for denial.~~

A. A party who is aggrieved by a final administrative decision may file with the Director, not later than 30 days after service of the final administrative decision, a written motion for rehearing or review of the decision specifying the grounds for rehearing or review.

B. A party filing a motion for rehearing or review under this Section may amend the motion at any time before it is ruled upon by the Director. Any other party may file a response to the motion for rehearing or review within 15 days after the date the motion is filed with the Director. The director may require that the parties file supplemental memoranda explaining the issues raised in the motion and may permit oral argument.

C. The Director may grant a rehearing or review of the final administrative decision for any of the following reasons materially affecting the requesting party's rights:

1. Irregularity in the proceedings of the hearings or an abuse of discretion, that deprived the party of a fair hearing,
2. Misconduct by the administrative law judge or the prevailing party,
3. Accident or surprise that could not have been prevented by ordinary prudence,
4. Newly discovered material evidence that could not with reasonable diligence have been discovered and produced at the original hearing,
5. Excessive or insufficient penalties,
6. Error in the admission or rejection of evidence or other errors of law occurring at the hearing, or
7. That the decision is not supported by the evidence or is contrary to law.

D. The Director shall rule on the motion within 15 days after the response to the motion is filed. If no response to the motion is filed, the Director shall rule on the motion within five days after the expiration of the response period.

E. An order issued by the Director granting a rehearing or review shall specify the grounds for the rehearing or review.

R9-1-104. ~~Hearing officer; disqualification; substitution~~ Repealed

~~**A.** The Director or a designee may serve as hearing officer.~~

~~**B.** Any hearing officer is subject to disqualification. Any party may petition under A.R.S. § 36-112(B) for the disqualification of a hearing officer within five days of receipt of notice indicating the hearing officer's identity or upon discovering facts indicating grounds for disqualification.~~

~~**C.** The Director shall appoint a substitute hearing officer to replace a disqualified or unavailable hearing officer.~~

R9-1-105. ~~Communications regarding matters related to a contested hearing~~ Repealed

~~The parties, legal counsel and any person who may be affected by the outcome of a contested case shall not communicate with the Director, Department personnel who assist the Director in rendering a decision, or the hearing officer concerning any matter related to the proceeding prior to a final decision and order, except in the presence of all parties or their counsel or, if in writing, with copies to the Department, the Attorney General and all parties. Anyone receiving a prohibited communication shall promptly file a copy of written communication or summary of oral communication with the Department and serve copies of the same on each party and the Attorney General. The hearing officer shall give all other parties reasonable opportunity to respond to the communication.~~

R9-1-106. ~~Representation~~ Repealed

~~Any party may participate in the hearing in person or through legal counsel, except that a person other than an individual shall be represented by an attorney. A partnership may appear through any partner and an association through a key administrator or other executive officer. A party shall pay for its own legal representation.~~

R9-1-107. ~~Notice of hearing or prehearing conference~~ Repealed

~~**A.** The hearing officer shall set the time and place of the hearing or prehearing conference and give written notice to all parties and to all persons who have filed written petitions to intervene in the matter.~~

~~**B.** The notice shall contain:~~

~~1. The official file or other reference number, the name of the proceeding, and a general description of the subject matter;~~

~~2. The time, place and nature of the prehearing conference or hearing;~~

~~3. A statement of the legal authority and jurisdiction under which the prehearing conference and the hearing are to be held;~~

4. The name, official title, mailing address and telephone number of the hearing officer for the prehearing conference or hearing;
5. A statement that a party who fails to attend or participate in a prehearing conference, hearing or other stage of a hearing may be held in default; and
6. The names and mailing addresses of persons to whom notice is being given, including any counsel or employee who has been designated to appear for the Department.

C. The notice may include any other matters that the hearing officer considers desirable to expedite the proceedings.

R9-1-108. Prehearing conference, procedure and prehearing order Repealed

A. Any party may request a prehearing conference. The hearing officer shall determine whether a prehearing conference is necessary to deal with matters listed in subsection (B) of this Section. The hearing officer shall promptly notify the Department and the parties as provided in R9-1-107 if a prehearing conference is to be held.

B. The hearing officer shall conduct the prehearing conference to deal with settlement, stipulations, clarification of issues, rulings on identity and limitation of the number of witnesses, objections to proffers of evidence, use of written presentation for direct evidence, rebuttal evidence, or cross-examination; use of telephone, television, or other electronic means as a substitute for proceedings in person; order of presentation of evidence and cross-examination, rulings regarding issuance of subpoenas, discovery orders and protective orders; and such other matters as will promote the orderly and prompt conduct of the hearing. The hearing officer shall issue a prehearing order incorporating the matters determined at the prehearing conference.

C. The hearing officer may conduct all or part of the prehearing conference by telephone, television, or other electronic means so long as each participant in the conference has an opportunity to participate during the entire proceeding.

D. If a prehearing conference is not held, the hearing officer may issue a prehearing order, based on the pleadings, to regulate the conduct of the proceedings.

R9-1-109. Pleadings, briefs, motions Repealed

The hearing officer, at appropriate stages of the proceedings:

1. shall give all parties full opportunity to file pleadings, motions, objections and offers of settlement.
2. may give all parties full opportunity to file briefs, proposed findings of fact and conclusions of law.

R9-1-110. Filing; computation of time; extension of time Repealed

A. The Director shall maintain a docket of all proceedings and shall assign each proceeding a number.

B. All papers in any proceeding shall be filed in the office of the Director, Arizona Department of Health Services, 1740 West Adams Street, Phoenix, Arizona 85007, within the time limit, if any, for such filing. Papers may be transmitted by ordinary or express mail, or otherwise delivered, but must be timely received at the Office of the Director. Service thereof shall be made simultaneously on all parties to the proceeding. A document shall be considered to be filed on the date received by the Director, established by the date stamp of the Director's Office of Administrative Counsel on its face.

C. Unless otherwise specifically provided in the rules or by an order of the Department, an original and one copy of all papers shall be filed.

D. Wherever these rules provide a specific limitation as to the time within which any papers are required to be filed with the Department in any proceeding, an additional period of seven days shall be available for parties who reside outside of Arizona.

E. In computing any period of time prescribed or allowed by these rules, the day of the act, event or default after which the designated period of time begins to run shall not be included. The last day of the period shall be included unless it is Saturday, Sunday or a state holiday, in which event the period runs until the end of the next day which is neither Saturday, Sunday, nor a state holiday. The computation shall include intermediate Saturdays, Sundays and holidays.

F. For good cause shown, the hearing officer may grant continuances and extensions of time.

R9-1-111. Record of hearings Repealed

The Director shall maintain a complete and separate record containing all documents and exhibits filed in connection with each hearing. Such record shall be made available upon request to the public during regular business hours.

R9-1-112. Service; proof of service Repealed

A. Service of process shall be required with respect to documents under this article. The party responsible for filing the document shall serve it. The original shall be filed with and retained by the Department and a copy shall be served on each party. Service shall be complete at the time of personal service, the date indicated on the return receipt if served by certified mail, or the date when placed in the mail if served by regular mail.

B. The following shall establish proof of service:

1. If transmitted by certified mail, the return of the signed return receipt; or
2. If personally served, filing with the Department a sworn affidavit stating when, how and by whom the document was served and the date of such service.

C. Requirements for service of documents shall be:

1. For complaints, notices of hearing or prehearing conference, decisions or final orders of the Director, transmission either by personal service or by certified mail to the correct address of record; if served on a corporation, partnership, or association, delivery to the statutory agent, corporate officer, partner, owner or co-owner, or appropriate agent.
2. For all other documents, either by personal service, or by certified or regular mail to the correct address of record.
3. When a party is represented by an attorney, service shall be made on such attorney.

R9-1-113. Default Repealed

A. If a party fails to attend or participate in a prehearing conference, hearing, or other stage of a hearing, the hearing officer may serve upon all parties a proposed default order, including a statement of the grounds, with regard to the non-participating party.

B. Within seven days after service of a proposed default order:
1. The party against whom it was issued may file a written motion requesting that the proposed default order be vacated and stating the grounds relied upon.
2. The hearing officer may adjourn the proceedings or conduct them without the party against whom a proposed default order was issued, maintaining due regard for the interests of justice and the orderly and prompt conduct of the proceedings.

C. The hearing officer shall either issue or vacate the default order promptly after expiration of the time specified in subsection (B) or upon filing of the motion.

D. After issuing a default order, the hearing officer shall conduct any further proceedings necessary to complete the adjudication without the defaulting party and shall determine ail issues in the hearing, including those affecting that party.

R9-1-114. Intervention Repealed

A. A person seeking to intervene in any hearing shall file a petition for intervention, specifying why the petition should be granted.

B. Requirements for petitions for intervention are:
1. A petition shall be filed with the Department and served upon all parties at least 15 days prior to the hearing.
2. A petition shall demonstrate that the petitioner's legal interests may be substantially affected by the hearing.
3. Any party may file a response to the petition for intervention within five days of service of the petition upon the party. A copy of the response shall be served upon each party.

C. The hearing officer shall consider the following in deciding on the petition:
1. Whether the proposed petition for intervention is in the interests of justice.
2. Whether it may unduly delay or prejudice the hearing.
3. Whether the applicant's interest is represented by any other party to the hearing.

D. The hearing officer shall decide on the petition for intervention at least three days prior to the hearing date and shall promptly notify the petitioner and all parties of the decision. The hearing officer may continue a hearing or provide for a prehearing conference or both to give a party sufficient time to prepare for the hearing or to file a response to the petition.

E. The hearing officer may limit the intervener's participation to issues in which the intervener has a particular interest as demonstrated in the petition.

R9-1-115. Subpoenas Repealed

A. The hearing officer may issue a subpoena pursuant to A.R.S. § 41-1062(A)(4), either at the hearing officer's discretion or at the request of any party. The hearing officer may decline to issue a subpoena for irrelevant, immaterial or cumulative evidence.

B. A request for subpoena shall be in writing, filed with the Department and served on each party at least seven days prior to the date set for hearing and shall state:
1. The identification of the person or document requested;
2. All addresses at which the subpoena shall be served; and
3. The facts expected to be established by the person or document subpoenaed, which are necessary for a determination of relevancy and materiality.

C. If more than two subpoenas are requested to establish a single fact in dispute, the request for subpoena must state the reason why the additional subpoena is not merely repetitive.

D. The person to whom a subpoena is directed shall comply with its provisions unless, prior to the date set for hearing, the hearing officer grants a written request to quash or modify the subpoena. The request shall briefly, but thoroughly, state the reasons therefor. The hearing officer shall grant or deny such request by order.

E. The party requesting the subpoena shall serve it upon the person to whom it is directed.

R9-1-116. Procedure at hearing Repealed

At a hearing:

1. The hearing officer shall regulate the course of the proceedings and shall conform with any prehearing order.

2. ~~To enable disclosure of relevant facts and issues, the hearing officer shall give all parties the opportunity to testify, respond, present evidence and argument, present witnesses, conduct examination and cross-examination, and submit rebuttal evidence, except as restricted by a limited grant of intervention or by the prehearing order.~~
3. ~~The hearing officer may give nonparties an opportunity to present, under oath, oral or written statements. The hearing officer shall give all parties an opportunity to cross-examine the witness, challenge or rebut the statement.~~
4. ~~The hearing officer may conduct all or part of the hearing by telephone, television or other electronic means, so long as each party or interested party has an opportunity to participate in the entire proceeding as it takes place.~~
5. ~~All hearings are open to public observation, except where closed pursuant to an express provision of law. A hearing conducted by telephone, television or other electronic means shall be made available to members of the public by the opportunity, during regular office hours, to hear or inspect the record of the Department, and to inspect any transcript of the hearing obtained by the Department.~~

R9-1-117. ~~Evidence~~ Repealed

~~A.~~ ~~All witnesses at a hearing shall testify under oath or affirmation. All parties shall have the right to present such oral or documentary evidence and to conduct such cross-examination as may be required for a full and true disclosure of the facts. The hearing officer shall receive relevant, probative and material evidence, rule upon offers of proof, and exclude all evidence the hearing officer has determined to be irrelevant, immaterial or unduly repetitious. The hearing officer shall admit the kind of evidence on which reasonably prudent people would rely, even if it would be inadmissible in a civil court trial.~~

~~B.~~ ~~Unless otherwise ordered by the hearing officer, documentary evidence shall be limited in size when folded to 8 2 x 11 inches. The submitting party shall furnish a copy of each documentary exhibit to each party of record present, and three additional copies shall be furnished to the Department, unless the Department or hearing officer otherwise directs. When relevant and material matter offered in evidence by any party appears in a larger work, containing other information, the party shall plainly designate the offered matter. It the other matter is in such volume as would unnecessarily encumber the record, such book, paper or document shall not be received in evidence but may be marked for identification and, if properly authenticated, the relevant and material matter may be read into or photocopied for the record. All documentary evidence offered shall be subject to appropriate and timely objection. When ordered by the hearing officer, the parties shall exchange copies of exhibits prior to or at the hearing.~~

R9-1-118. ~~Recommended decision; Director's decision~~ Repealed

~~A.~~ ~~If the hearing officer is the Director, the hearing officer shall render a decision.~~

~~B.~~ ~~If the hearing officer is not the Director, the hearing officer shall render a recommended decision pursuant to A.R.S. § 36-112(C).~~

~~C.~~ ~~A decision or recommended decision shall include separately stated findings of fact, conclusions of law, and policy reasons for the decision if it is an exercise of the Director's discretion, including the reasoning for the remedy recommended.~~

~~D.~~ ~~Findings of fact shall be as required by A.R.S. § 41-1061(G). The experience, technical competence, or specialized knowledge of the hearing officer may be utilized in evaluating evidence.~~

~~E.~~ ~~If a substitute hearing officer is appointed under Section R9-1-104, the substitute hearing officer shall use any existing record and may conduct further appropriate proceedings in the interests of justice.~~

~~F.~~ ~~The hearing officer may allow the parties a designated amount of time after the hearing to submit proposed findings.~~

~~G.~~ ~~A recommended decision pursuant to this Section shall be rendered within 30 days after conclusion of the hearing or after submission of proposed findings under subsection (F), unless the Director waives or extends this period for good cause.~~

~~H.~~ ~~The recommended decision shall be delivered to the Director.~~

~~I.~~ ~~The Director may transmit a copy of the recommended decision to each party who shall then have ten days from the date of service to file a memorandum of objections or exceptions to it. The memorandum shall detail reasons why the recommended decision is in error, with appropriate citations to the record, statutes, rules and other authority. The Director may consider such memorandum in making a decision but shall not consider untimely or unsupported memoranda. A recommended decision snail not be subject to a request for review, rehearing or judicial review.~~

R9-1-119. ~~Director's decision~~ Repealed

~~Within 30 calendar days after either receipt of any recommended decision from the hearing officer or the final day for filing a memorandum of comments or exceptions to the recommended decision, together with any sufficient, timely exceptions filed, the Director shall issue a decision as provided in A.R.S. § 36-112(C). When the Director is the hearing officer, the decision shall be issued within 60 days following the final day of the hearing.~~

R9-1-120. ~~Rehearing or review of decision~~ Repealed

~~A.~~ ~~Except as provided in subsection (E), any party to a hearing before the Department who is aggrieved by a decision rendered in such case may file with the Director, not later than 15 days from the date of service of the decision, a written request for rehearing or review of the decision. The request shall specify the particular grounds for rehearing or review. The requesting party shall serve copies upon all other parties in compliance with Section R9-1-112.~~

~~**B.** A request for rehearing or review under this rule may be amended at any time before it is ruled upon by the Director. Any party may file a response to the request for rehearing or review within ten days after service of the request on that party. The Director may require the filing of written argument on the issues raised in the motion and may provide for oral argument.~~

~~**C.** A rehearing or review of the decision may be granted for any of the following causes which materially affect the requesting party's rights:~~

~~1. Irregularity in the hearing of the Department or its hearing officer or the prevailing party, or any order or abuse of discretion, whereby the requesting party was deprived of a fair hearing;~~
~~2. Misconduct of the Department, its hearing officer or the prevailing party;~~
~~3. Accident or surprise which could not have been prevented by ordinary prudence;~~
~~4. Newly discovered material evidence which could not with reasonable diligence have been discovered and produced at the original hearing;~~
~~5. Excessive or insufficient penalties;~~
~~6. Error in the admission or rejection of evidence or other errors of law occurring at the hearing; or~~
~~7. The decision is not justified by the evidence or is contrary to law.~~

~~**D.** The Director may affirm or modify the decision or grant a rehearing to the requesting party on all or part of the issues for any of the reasons set forth in subsection (C). An order granting a rehearing shall specify with particularity the grounds on which the rehearing is granted, and the rehearing shall cover only those matters specified. All parties to the hearing may participate as parties at any rehearing.~~

~~**E.** The Director may, on his own initiative, order a rehearing or review of a decision within 15 days after a decision is rendered, for any reason for which a rehearing on motion of a party might have been granted. The order granting such a rehearing shall specify the grounds therefor.~~

R9-1-121. ~~Effectiveness of orders~~ Repealed

~~**A.** Unless otherwise stated in the Director's decision, a decision becomes a final order, in accordance with Section R9-1-119, as follows:~~

~~1. When the decision is rendered, if further review is unavailable;~~
~~2. Fifteen days after service of the decision, if no party has filed a petition for review or reconsideration.~~

~~**B.** Unless otherwise stated in the final order, the final order is effective on the date of service upon a party.~~

ARTICLE 2. PUBLIC PARTICIPATION IN RULEMAKING

R9-1-201. ~~Agency record~~ Definitions

~~The official rulemaking record is located in the Office of the Director and may be reviewed any working day, Monday through Friday, from 8:00 a.m. until 5:00 p.m. except state holidays.~~

In this Article, unless otherwise specified:

1. "Rulemaking record" means a file maintained by the Department as specified in A.R.S. § 41-1029.
2. "Oral proceeding" means a public gathering, held by the Department, for the purpose of receiving comment and answering questions about a proposed rule.
3. "Substantive policy statement" has the same meaning as in A.R.S. § 41-1001(20).

R9-1-202. ~~Petition for adoption of rule~~ Rulemaking Record

~~**A.** A petition to adopt, amend or repeal a rule, pursuant to A.R.S. § 41-1033, shall be filed with the Director as prescribed in this Section. Each petition shall contain:~~

~~1. The name and current address of the person submitting the petition.;~~
~~2. For the adoption of a new rule, the specific language of the proposed rule.;~~
~~3. For the amendment of a current rule, the citation for the applicable A.A.C. number and title. Included in the request shall be the specific language of the current rule; any language to be deleted shall be stricken through but legible, and any new language shall be underlined.~~
~~4. For the repeal of a current rule, the citation for the applicable A.A.C. number and title of the rule proposed for repeal.~~
~~5. The reasons the rule should be adopted, amended or repealed, specifically stating in reference to an existing rule, why the rule is inadequate, unreasonable, unduly burdensome, or otherwise not acceptable. Additional supporting information for the petition may be provided, including:~~
~~a. Any statistical data or other justification, with clear references to attached exhibits;~~
~~b. An identification of what persons or segment of the public would be affected and how they would be affected; and~~
~~c. If the petitioner is a public agency, a summary of relevant issues raised in any public hearing, or any written comments offered by the public.~~
~~6. The signature of the person submitting the petition.~~

Except on a state holiday, an individual may review a rulemaking record at the Office of the Director, Monday through Friday, from 8:00 a.m. until 5:00 p.m.

R9-1-203. ~~Public comments~~ Petition for a Rule; Review of a Rule, an Agency Practice or a Substantive Policy Statement

~~**A.** Any person may comment upon a rule proposed by the Department by submitting written comments on the proposed rule to the Director.~~

~~**B.** Any document is considered to have been submitted on the date it is received by the Department If a document is mailed, the date of receipt shall be the postmarked date.~~

~~**C.** All written comments received pursuant to A.R.S. § 41-1023 shall be considered by the Department.~~

A. An individual submitting a petition to the Department to make a rule under A.R.S. § 41-1033 shall include the following on the petition:

1. The name and address of the individual submitting the petition;
2. An identification of the rule;
3. The suggested language of the rule;
4. The reason why a new rule should be made with supporting information, including, if applicable:
   a. Statistical data with references to attached exhibits, and
   b. An identification of the persons who would be affected by the rule and how the persons would be affected;
5. The signature of the individual submitting the petition; and
6. The date the petition is signed.

B. An individual submitting a petition to the Department under A.R.S. § 41-1033 requesting that the Department review an agency practice or substantive policy statement that the individual alleges constitutes a rule shall include the following on the petition:

1. The name and address of the individual submitting the petition,
2. The reason the individual alleges the agency practice or substantive policy statement constitutes a rule,
3. The signature of the individual submitting the petition, and
4. The date the petition is signed.

C. An individual who submits a petition under subsection (B) shall attach a copy of the substantive policy statement or a description of the agency practice to the petition.

D. The Director shall notify an individual who files a petition under subsection (A) or (B) of the Department's decision in writing within seven days of receipt of the petition.

R9-1-204. ~~Oral proceedings~~ Repealed

~~**A.** Requests for oral proceedings, as prescribed in A.R.S. § 41-1023(B), shall:~~

~~1. Be filed with the Director;~~
~~2. Include the name and current address of the person making the request; and~~
~~3. Refer to the proposed rule and include, if known, the date and issue of Register in which the notice was published.~~

~~**B.** The oral proceeding shall be recorded either by an electronic recording device or stenographically, and any resulting cassette tapes or transcripts, registers and all written comments received shall become part of the official record.~~

~~**C.** The presiding officer shall utilize the following guidelines to conduct oral proceedings:~~

~~1. Voluntary registration of attendees.~~
~~2. Registration of persons intending to speak. Registration information shall include the registrant's name, representative capacity, if applicable, a notation of their position with regard to the proposed rule and the approximate length of time they wish to speak.~~
~~3. Opening of the record. The presiding officer shall open the proceeding by identifying the rules to be considered, the location, date, time and purpose of the proceeding, and present the agenda.~~
~~4. A statement by Department representatives. The statement shall explain the background and general content of the proposed rules.~~
~~5. A public oral comment period. Comments may be limited to a reasonable time period, as determined by the presiding officer. Oral comments may be limited to prevent undue repetition.~~
~~6. Closing remarks. The presiding officer shall announce the location where the written public comments are to be received and the date and time of the close of record.~~

R9-1-205. ~~Petition for delayed effective date~~ Repealed

~~**A.** A written petition to delay the effective date of the rule, pursuant to A.R.S. § 41-1032 shall be filed with the Director. The petition shall contain:~~

~~1. The name and current address of the person submitting the petition;~~
~~2. Identification of the proposed rule;~~
~~3. The need for the delay, specifying the undue hardship or other adverse impact that may result if the request for a delayed effective date is not granted, and the reasons why the public interest will not be harmed by the later date; and~~
~~4. The signature of the person submitting the petition.~~

R9-1-206. ~~Written criticism of rule~~ Repealed

~~**A.** Any person may file a written criticism of an existing rule with the Director.~~

~~**B.** The criticism shall clearly identify the rule addressed and specify why the existing rule is inadequate, unduly burdensome, unreasonable or otherwise considered to be improper.~~

~~**C.** The Director shall acknowledge receipt of any criticism within ten working~~ f days and ~~shall place the criticism in the official record for review by the Department pursuant to A.R.S. § 41-1054.~~

ARTICLE 3. DISCLOSURE OF ~~INFORMATION AND~~ MEDICAL RECORDS

R9-1-311. Definitions

~~**A.** "Medical information", as used in this Article, shall include all clinical records, medical reports, laboratory statements or reports, any file, film, record or report or oral statement relating to diagnostic findings and treatment of patients, as well as information relating to contacts, suspects and associates of communicable disease patients.~~

~~**B.** "Employee", as used in this Article, shall include all officers and employees of the Department and of any local health department, including those who may be loaned or assigned by the Department or local health departments by another governmental or private health agency and including consultants paid on a fee basis by the Department or a local health department.~~

~~**C.** "Department" means the Arizona Department of Health Services.~~

~~**D.** "Local health department", as used in this Article, means any district, county or city health department or any combination thereof.~~

~~**E.** "Director" means the Director of the Department of Health Services.~~

In this Article, unless otherwise specified:

1. "Incompetent" means an individual who is determined by a court of competent jurisdiction to require a legal guardian to protect the interests of and to represent the individual.
2. "Medical record" means all communications listed in A.R.S. § 12-2291(4).
3. "Employee" means an individual who works for the Department for compensation.
4. "Human Subjects Research Committee" means individuals designated by the Director to review and approve the release of medical information.
5. "Legal guardian" means an individual appointed by the court under A.R.S. Title 14, Chapter 5 or Title 36, Chapter 5.
6. "Parent" means a biological or adoptive mother or father of an individual.
7. "Volunteer" means an individual who works for the Department without compensation.

R9-1-312. ~~Prohibition against disclosure~~ Disclosure of a Medical Record

~~No disclosure by any employee of any medical information in his possession or in the possession of the Department or of any local health department which relates to any identifiable individual or his family shall be made, directly or indirectly, except as authorized in this Article.~~

A. Except as authorized in subsection (B), an employee or volunteer shall not disclose a medical record the employee or volunteer has obtained or has access to as a result of being employed by or volunteering with the Department that allows an individual to be identified.

B. Unless otherwise prescribed by law, an employee or volunteer may disclose a medical record:

1. If an individual who is 18 years of age or older and is not incompetent is identified in the medical record, only with the written permission of the individual.
2. If an individual who is less than 18 years old or is incompetent is identified in the medical record, only with written permission from the individual's parent or legal guardian;
3. To the surviving spouse or legal representative of an individual's estate, upon the surviving spouse or legal representative's written request;
4. At the direction of the Director, or the Human Subjects Research Committee, if the medical record is sought for a scientific or medical research purpose; or
5. As required by a court order issued by a court of competent jurisdiction.

R9-1-313. ~~Authority for refusal to disclose~~ Repealed

~~Any request or demand for medical information, disclosure of which is forbidden by this Article, shall be declined upon the authority of this Article and A.R.S. §§ 36-107 and 36-136(G)(18). If any employee is sought to be required, by subpoena or otherwise, to produce such medical information, he shall respectfully decline to present or divulge the same, basing his refusal upon the provisions of law and this Article prescribed thereunder and shall through established administrative channels seek the advice of the appropriate county attorney or the Attorney General.~~

R9-1-314. ~~Information which may be disclosed~~ Repealed

~~Medical information required by R9-1-312 to be kept confidential is hereby authorized to be disclosed in the following cases and for the following purposes:~~

~~1. At the request or with the permission of the person or persons concerning whom the medical information directly relates. If such a person is a minor or an incompetent, such request or permission shall be obtained from his parent or guardian.~~

~~2. Any medical information relating to the death of a person may be furnished to his surviving spouse or relative or the legal representative of his estate upon the written request of such qualified person.~~
~~3. With proper administrative approval, to any physician, nurse or other paramedical personnel or to any officer or employee of any federal, state or local government or non-profit institution or foundation who, acting in his official capacity and within the scope of his employment, has, within the reasonable discretion of a properly authorized employee who is disclosing or has been requested to disclose such information, a valid purpose for acquiring the same, which purpose is consistent with the administration of a project or program under or with the assistance of the Department, or a local health department or which purpose is to provide medical care to the individual concerned or suspected contacts of such individuals.~~
~~4. Where the purpose for which the medical information is sought is not inconsistent with the objectives and purposes of the Department or a local health department and if Departmental administration permits, the Director or in the case of a local health department, the director thereof, may authorize the disclosure of any such information.~~
~~5. Authorization for disclosure of information pursuant to this regulation shall not be relied upon to contravene the intent of any statute which specifically prohibits the disclosure of certain information.~~

R9-1-315. ~~Confidentiality of information received from or through the federal government~~ Repealed

~~Notwithstanding anything in this Article to the contrary, any medical information contained in the records of this Department, the source of which is the Secretary of the U.S. Department of Health, Education and Welfare of any person acting under him or from any provider of services acting as such pursuant to U.S. Public Law 89-97 and any amendments thereto, shall be disclosed only as provided by federal law and the rules and regulations promulgated thereunder.~~

NOTICE OF FINAL RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 13. DEPARTMENT OF HEALTH SERVICES
HEALTH PROGRAMS SERVICES

PREAMBLE

1. Sections Affected — **Rulemaking Action**

Article 1	Amend
R9-13-101	Amend
R9-13-102	Amend
R9-13-103	Amend
R9-13-104	Amend
R9-13-105	Amend
R9-13-106	Repeal
R9-13-107	Amend
R9-13-108	Amend
R9-13-109	Amend

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 36-104(3) and 36-136(F)

Implementing statutes: A.R.S. §§ 36-899.01, 36-899.02, and 36-899.03

3. The effective date of the rules:

July 16, 2002

4. A list of all previous notices appearing in the Register addressing the final rules:

Notice of Rulemaking Docket Opening: 7 A.A.R. 1777, April 27, 2001

Notice of Proposed Rulemaking: 8 A.A.R. 1769, April 12, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Karen Kuhfuss, Planning and Partnership Unit Manager

Address: Arizona Department of Health Services
Bureau of Community and Family Health Services
2927 N. 35th Avenue, Suite 300
Phoenix, AZ 85017

Telephone:	(602) 364-1400
Fax:	(602) 364-1496
or	
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6. An explanation of the rules, including the agency's reasons for initiating the rules:

The Arizona Department of Health Services (the Department) is amending 9 A.A.C. 13, Article 1 to update hearing screening rules and to address issues identified in the 1997 five-year review report approved by the Governor's Regulatory Review Council on September 9, 1997. The rules are amended to better protect the public, accurately reflect industry standards and practices, be consistent with state and federal statutes and rules, reflect current Department policy, and conform to current rulemaking format and style requirements.

R9-13-102 is amended to clarify the population to be screened and to add screening requirements for children attending preschool in public, accommodation, charter, and private schools. R9-13-103 is amended to specify when screening is required and to designate acceptable hearing screening methods. In R9-13-104, the criteria for passing each screening method is detailed and the requirements for a second screening are identified. R9-13-105 is amended to clarify requirements for student referrals, student evaluations, and follow-up. R9-13-106 is repealed. R9-13-107 is amended to identify hearing screener qualifications and training requirements. R9-13-108 is amended to clarify hearing screening equipment standards and requirements. Finally, amended language in R9-13-109 clarifies the information schools are required to maintain and to report to the Department.

7. A reference to any study that the agency relied on in its evaluation of or justification for the rules and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

Not applicable

8. A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

The rulemaking directly impacts Arizona's 1,975 public, accommodation, charter, and private schools (schools), the more than 900,000 students enrolled in these schools, and their families. (The number of schools and students is based on Arizona Department of Education 2000/2001 data.)

The rulemaking incorporates existing requirements and practices already established in rule, current practices of the schools and the Department that are already in place, and new requirements and changes that reflect current industry practice. The rulemaking is supported by stakeholders.

The overall economic impact of the rulemaking is expected to be minimal, with the benefits of the rulemaking outweighing the costs. The retention of requirements and practices already in rule should not result in cost increases for schools. The incorporation of current practices into rule may result in minimal to moderate cost increases for schools. New requirements and changes in existing requirements designed to improve the efficiency and effectiveness of the hearing screening process should also result in only minimal to moderate cost increases for schools.

Cost Bearers

The rulemaking will directly impact schools, school age children and their families, and the Department.

Schools: The rulemaking does not significantly change the way in which schools conduct student hearing screenings. Schools will continue to be responsible for administration of the hearing screening program; and the current costs associated with administering the hearing screenings should not change. In addition, schools will continue to be responsible for ensuring that all students receiving hearing evaluation referrals are evaluated, and that all students enrolled in special education services or under evaluation for special education services have hearing evaluations.

Schools may realize minimal cost increases due to the requirement that children enrolled in preschool have hearing screenings. This cost will be mitigated, however, to the extent that the majority of preschool children enrolled in schools, many of whom are enrolled in preschool programs for children with disabilities, are already having hearing screenings. Arizona Department of Education information shows that for the school year 2002/2001 there were 5,827

children enrolled in public school, accommodation school, and charter school preschool programs for children with disabilities. Department statistics for the same school year show that there were 11,843 preschool children screened for hearing in Arizona school preschool programs.

In addition, a school may incur slightly higher costs to purchase and maintain hearing testing equipment, if the school chooses to use otoacoustic emission testing.

Families: The parents and families of school age children will continue to bear the cost of paying for medical and/or audiological follow-up of identified hearing loss.

Department: The Department will bear administrative costs in keeping track of information regarding data collection and screener qualifications.

Small Businesses: Some charter schools and private schools are small businesses and will bear some administrative costs in carrying out the requirements in this Article.

Beneficiaries

Arizona children and families will benefit from the revised rules as recipients of quality hearing screening services, early identification of significant hearing loss, and appropriate referral for treatment.

The addition of new technology and testing methodologies will allow for more accurate screening of the difficult-to-test populations resulting in potentially more reliable results and appropriate referrals.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

No changes have been made in the text of the adopted rules from that in the proposed rules, except grammatical and organizational changes suggested by the staff of the Governor's Regulatory Review Council.

11. A summary of the principal comments and the agency response to them:

The Department held an oral proceeding on the proposed rulemaking on May 13, 2002. During the oral proceeding and the comment period of April 12, 2002 through the close of record on May 13, 2002, the Department did not receive any written or oral comments on the proposed rulemaking.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rules:

The following is incorporated by reference in R9-13-108:

American National Standard Specifications for Instruments to Measure Aural Acoustic Impedance and Admittance, S3.39-1987, Standards Secretariat, Acoustical Society of America, 335 East 45th Street, New York, New York 10017-3483, October 5, 1987.

14. Was the rule previously adopted as an emergency rule?

No

15. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

CHAPTER 13. DEPARTMENT OF HEALTH SERVICES HEALTH PROGRAMS SERVICES

ARTICLE 1. HEARING ~~EVALUATION SERVICES~~ SCREENING

Section

ARTICLE 1. HEARING ~~EVALUATION SERVICES~~ SCREENING

R9-13-101. Definitions

In this Article, unless the context otherwise requires:

~~1. "ANSI" means the American National Standards Institute which approves the equipment standards for audiometers.~~
~~2. "At risk" means the presence of conditions or symptoms which indicate a possibility of developing hearing problems.~~
1. "Assistive listening device" has the meaning in A.R.S. § 36-1901.
~~3.~~2. "Audiologist" means ~~a professional who specializes in the identification and prevention of hearing problems and in the nonmedical rehabilitation of those who have hearing problems. An audiologist holds a Master's or Doctoral degree in audiology and holds an Certificate of Clinical Competence in Audiology from the American Speech- Language-Hearing Association~~ an individual licensed under A.R.S. Title 36, Chapter 17.
~~4.~~3. "Audiometer" means an electronic device that generates signals used to measure hearing ~~thresholds~~.
~~5.~~4. "Calibration" means ~~an electronic check to determine the precise characteristics of audiometric equipment~~ a determination of the accuracy of an instrument by measurement of a variation from a standard.
~~6. "Compliance" means the ease with which the eardrum and middle ear mechanism moves.~~
~~7. "Certificate of Clinical Competence" means the professional standard of practice for individuals who provide independent clinical services in either audiology or speech-language pathology as set forth in the American Speech-Language Hearing Association (ASHA) publication, March 1989, Standards for the Certificate of Clinical Competence, c/o American Speech-Language-Hearing Association, 10801 Rockville Pike, Rockville, Maryland 20852-3279, incorporated herein by reference and on file with the Office of the Secretary of State.~~
5. "Cochlear implant" means a surgically inserted device that electrically stimulates the hearing nerve in the inner ear.
6. "dB" means decibel.
7. "dB HL" means decibel hearing level.
8. "Deaf" has the meaning in A.R.S. § 36-1941.
9. "Department" means the Arizona Department of Health Services.
10. "Documentation" means signed and dated information in written, photographic, electronic, or other permanent form.
11. "Effusion" means the escape of fluid from a blood or lymphatic vessel into tissue or a cavity.
~~8.~~12. "Frequency" means the number of cycles per second of a sound wave.
~~9. "HCP" means the Hearing Conservation Program, Division of Family Health Services, Department of Health Services.~~
13. "Hard of hearing" has the meaning in A.R.S. § 36-1941.
14. "Hearing aid" has the meaning in A.R.S. § 36-1901.
15. "Hearing screening" means a test of a student's ability to hear certain frequencies at a consistent loudness performed in a school by an individual who meets the requirements in R9-13-107.
~~10.~~16. "Hz" means Hertz, a unit of frequency equal to one cycle per second.
~~11. "Hearing screening" means the evaluation of the ability to hear certain frequencies at a consistent loudness and may include an evaluation of the function of the middle ear system.~~
17. "Immittance" means the ease of transmission of sound through the middle ear.
18. "Inner ear" means the semicircular canals, auditory nerve, and cochlea.
~~12.~~19. "Intensity" means the ~~amount of acoustic energy which gives the sensation~~ strength of a sound wave striking the eardrum resulting in the perception of loudness~~. Intensity is~~ as expressed in decibels ~~(dB)~~ or decibels hearing level ~~(dB HL)~~.
~~13. "Local Education Agency" means a public school district as defined in A.R.S. § 15-101.~~
~~14. "Noise letter" means a letter containing information regarding the adverse effects of exposure to loud noise and a recommendation for audiological or medical examination.~~
20. "Kindergarten" means the grade level immediately preceding first grade.
21. "Middle ear" means the eardrum, malleus, incus, stapes, and eustachian tube.
22. "mm H_2O" means millimeters of water.
23. "Noise floor" means sounds present in the auditory canal from either the environment or bodily functions such as breathing and blood flow.
24. "Otitis media" means inflammation of the middle ear.
25. "Otoacoustic emissions" means the sounds generated from the inner ear.
26. "Outer ear" means the pinna, lobe, and auditory canal.
27. "Parent" has the meaning in A.R.S. § 15-101.
28. "Physician" means an individual licensed under A.R.S. Title 32, Chapter 13 or 17.
29. "Preschool" means the instruction preceding kindergarten provided to individuals three to five years old through a:
    a. School as defined in A.R.S. § 15-101,
    b. Accommodation school as defined in A.R.S. § 15-101,
    c. Charter school as defined in A.R.S. § 15-101, or
    d. Private school as defined in A.R.S. § 15-101.

30. "Primary care practitioner" means an individual licensed as a registered nurse practitioner under A.R.S. Title 32, Chapter 15 or a physician assistant under A.R.S. 32, Chapter 25.
31. "Pure tone" means a single frequency sound.
32. "Reproducibility" means the correlation of two responses measured simultaneously and reported by percentage.
33. "School" means:
    a. School as defined in A.R.S. § 15-101;
    b. Preschool,
    c. Kindergarten,
    d. Accommodation school as defined in A.R.S. § 15-101,
    e. Charter school as defined in A.R.S. § 15-101, or
    f. Private school as defined in A.R.S. § 15-101
34. "School administrator" means an individual or the individual's designee assigned to act on behalf of a school by the body organized for the government and the management of the school.
35. "School year" means the period between July 1 and the following June 30.
36. "Screener" means an individual qualified to perform a hearing screening in a school according to R9-13-107.
37. "Special education" has the meaning in A.R.S. § 15-761.
~~15.~~38. "Speech-language pathologist" means ~~a professional who specializes in the assessment, prevention, and nonmedical treatment of communication disorders; holds a Master's or Doctoral degree in speech-language pathology; and holds a Certificate of Clinical Competence in speech-language pathology from the American Speech-Language-Hearing Association~~ an individual licensed under A.R.S. Title 36, Chapter 17.
~~16. "Threshold" means the lowest intensity level at which a pure tone is detectable during 50% of the presentations.~~
39. "Student" means an individual enrolled in a school.
40. "Supervision" has the meaning in A.R.S. § 36-401.
~~17.~~41. "Tympanogram" means a chart of the ~~results of compliance measurements of the eardrum and middle ear system as a function of pressure~~ indirect measurements of the ease of movement of the parts of the middle ear as air pressure in the auditory canal changes. ~~Information on a tympanogram shall include pressure, compliance, and physical volume.~~
42. "Tympanometer" means a device that indirectly measures the ease of movement of the parts of the middle ear as air pressure in the auditory canal changes.
~~18.~~43. "Tympanometry" means the ~~measurement of changes in the compliance of the middle ear system as air pressure is varied in the external ear canal~~ indirect measurement of the ease of movement of the parts of the middle ear as air pressure in the auditory canal changes.

R9-13-102. Hearing Screening Population ~~to be Screened~~

~~Unless the parent or legal guardian objects and submits a statement of such objection, a public or private school shall administer a hearing screening, in accordance with R9-13-103, to each child who comes within one of the following categories during the school year:~~

~~1. Children in preschool handicapped programs, kindergarten, and grades 1, 2, 6, and 9 or 10;~~
~~2. Children who repeated a grade within the past academic year;~~
~~3. Children who currently are receiving special education services and/or related services;~~
~~4. Children who enter school without record of a hearing test having been administered within one year prior to entry;~~
~~5. Children who failed a hearing rescreening within the previous year;~~
~~6. Children who have a documented hearing loss;~~
~~7. Children who are referred by a parent; guardian; teacher; administrator; school nurse; other school professional, including a speech pathologist, a school psychologist, or a staff member of the HCP; or self-referred for screening;~~
~~8. Students who have participated in industrial arts shop classes for more than one quarter; or~~
~~9. Children identified as "at risk" for hearing problems during the previous year's hearing screening.~~

A. A school administrator shall ensure that the following students have a hearing screening each school year:
1. A student enrolled in preschool, kindergarten, or grade 1, 2, 6, or 9;
2. A student enrolled in grade 3, 4, or 5, unless there is written documentation that the student had a hearing screening in or after grade 2;
3. A student enrolled in grade 7 or 8, unless there is written documentation that the student had a hearing screening in or after grade 6;
4. A student enrolled in grade 10, 11, or 12 unless there is written documentation that the student had a hearing screening in or after grade 9;
5. A student receiving special education; and
6. A student who failed a second hearing screening in the prior school year.

B. A school administrator shall ensure that a student has a hearing screening at the request of the student, the student's parent, a schoolteacher, a school nurse, a school psychologist, an audiologist, a physician, a primary care practitioner, a speech language pathologist, or Department staff.

C. A hearing screening is not required if a:
1. Student is age 16 years or over;
2. Student's parent objects in writing to the screening as allowed under A.R.S. § 36-899.04;
3. Written diagnosis or evaluation from an audiologist states that a student is deaf or hard of hearing; or
4. Student has a hearing aid, an assistive listening device, or a cochlear implant.

D. In addition to meeting the requirements in subsections (A) and (B), a school administrator shall ensure that a student who meets the criteria specified in State Board of Education rule R7-2-401 has a hearing screening required under R7-2-401.

R9-13-103. Hearing Screening ~~Test~~ Requirements

~~**A.** Children to be tested shall be given one of the following initial screening tests:~~
~~1. A four-frequency, pure-tone screening test. The following frequencies and their intensity in dB HL shall be utilized for the initial pure tone screening: 500 Hz at 25 dB HL, 1000 Hz at 20 dB HL, 2000 Hz at 20 dB HL, and 4000 Hz at 20 dB HL.~~
~~2. A tympanometry screening in conjunction with a three- frequency, pure-tone screening.~~
~~a. The tympanogram shall be plotted at three points: +200 mm H20, point of maximum compliance, and -300 mm H20.~~
~~b. The three-frequency screening shall occur at 1000 Hz, 2000 Hz, and 4000 Hz at 20 dB HL.~~

~~**B.** Children who fail either of the initial screening procedures shall be retested within 4 - 6 weeks.~~

~~**C.** Children who fail the second screening shall be given a threshold test within two weeks of the second screening utilizing the following frequencies: 500 Hz, 1000 Hz, 2000 Hz, 3000 Hz, 4000 Hz, and 8000 Hz.~~

A. Before performing a hearing screening, a screener shall visually inspect a student's outer ears for:
1. Fluid or drainage,
2. Blood,
3. An open sore, or
4. A foreign object.

B. If a screener inspects a student's outer ears and finds any of the conditions in subsection (A), the screener shall not perform a hearing screening.

C. A screener shall perform a hearing screening in each ear using one of the following hearing screening methods:
1. Four-frequency, pure tone hearing screening that screens at each of the following frequencies and intensities:
   a. 500 Hz at 25 dB HL,
   b. 1000 Hz at 20 dB HL,
   c. 2000 Hz at 20 dB HL, and
   d. 4000 Hz at 20 dB HL;
2. Three-frequency, pure tone hearing screening with tympanometry that:
   a. Includes a tympanogram that is generated automatically or is plotted at a minimum of the following three points:
      i. +100 mm H2O,
      ii. Point of maximum immittance, and
      iii. -200 mm H2O; and
   b. Screens at each of the following frequencies at 20 dB HL:
      i. 1000 Hz,
      ii. 2000 Hz, and
      iii. 4000 Hz; or
3. Otoacoustic emissions hearing screening using otoacoustic emissions equipment that generates a pass or no pass result:
   a. Using a minimum of three frequencies,
   b. At no less than 3 dB above the noise floor, and
   c. With reproducibility greater than 50%.

R9-13-104. Criteria for ~~Pass/fail~~ Passing a Hearing Screening; Requirements for Performing a Second Hearing Screening

~~**A.** A child shall fail the initial four-frequency pure-tone screening if there is not a response to each frequency at the prescribed screening level in each ear.~~

~~**B.** A child shall fail the tympanometry and three-frequency initial screening if any of the following conditions exist:~~
~~1. Peak compliance occurs outside the range of +100 mm H20 to -200 mm H20,~~
~~2. No point of maximum compliance occurs between +100 and -300 mm H20 (Type B tympanogram), or~~
~~3. No response occurs to the pure-tone screen at 1000 Hz, 2000 Hz, or 4000 Hz in either ear.~~

A. A student passes a hearing screening if:
1. During a four-frequency, pure tone hearing screening, the student responds in each ear to each frequency at each intensity listed in R9-13-103(C)(1)(a) through (C)(1)(d);

2. During a three-frequency, pure tone hearing screening with tympanometry, the student:
   a. Responds in each ear to each frequency as described in R9-13-103(C)(2)(b); and
   b. Reaches a point of maximum immittance in each ear within the range of +100mm H2O to -200mm H2O; or
3. During an otoacoustic emissions hearing screening, the student receives a pass result in each ear according to R9-13-103(C)(3).

B. If a student does not pass a hearing screening according to subsection (A), a screener shall perform a second hearing screening on the student no earlier than 30 days and no later than 45 days from the date of the first hearing screening. The screener shall perform the second hearing screening using the same method as the first hearing screening.

R9-13-105. Referral ~~Criteria and Notifications~~ ; Notification; Follow-up

~~**A.** The school shall provide a medical referral notification to the child's parent or legal guardian when any of the following conditions are determined to exist:~~
   ~~1. A hearing threshold level in one or more of the following frequencies which equals or exceeds 30 dB at 500 Hz, or 25 dB at 1000 Hz, 2000 Hz, 3000 Hz, 4000 Hz, and 8000 Hz in either ear;~~
   ~~2. Tympanometry indicates that peak compliance occurs outside the range of +100 to -200 mm H20; or~~
   ~~3. Tympanometry indicates that the point of maximum compliance does not occur between +100 and -300 mm H20.~~
~~**B.** The school shall provide a referral notification for an audiological evaluation to the child's parent or legal guardian when any of the following conditions exist:~~
   ~~1. The tympanometry portion of the screening is passed while the pure-tone portion of the screening is failed;~~
   ~~2. A child with a confirmed hearing loss responds to pure-tone threshold testing at a level of more than 10 dB poorer, at any frequency, than that indicated by threshold test results of the previous year; or~~
   ~~3. A child is wearing a hearing aid, in which case an annual audiological referral shall be made that includes a recommendation for an electroacoustic analysis of the aid to verify that it is functioning according to manufacturer's specifications.~~
~~**C.** The school shall notify the child's parent or legal guardian if the hearing test results indicate the need for medical or audiological referral. The referral notification shall be by letter or documented telephone call within ten working days of the test. A copy of the hearing test results and the otologic report form, to be completed by the child's physician, also shall be sent to the parent or legal guardian.~~
~~**D.** The school shall send a noise letter to the child's parent or legal guardian if the child's greatest degree of loss occurs at 4000 Hz in either ear.~~
~~**E.** Subsequent to tympanometry rescreening and threshold testing, the school shall consider a child "at risk" for hearing problems if peak compliance occurs from -160 mm through -200 mm H20 and the child's hearing threshold levels are within screening limits. The "at risk" determination shall require the school to send a letter to the child's parent or legal guardian containing suggestions for identification of behaviors which indicate possible middle ear disorder.~~

A. If a school administrator finds that a student does not require a hearing screening under R9-13-102(C)(3) or (C)(4), the school administrator shall provide to the student's parent, within 10 days from the date the finding is made, a referral to have the student's current hearing status evaluated by an audiologist, including an electroacoustic analysis of any hearing aid or assistive listening device, unless there is documentation from an audiologist specifying a different evaluation schedule.

B. If a screener finds any of the conditions listed in R9-13-103(A) and a student does not have a hearing screening:
   1. A school administrator shall provide to the student's parent, within 10 days from the date the condition is found, a referral to have the student's outer ears evaluated by a physician or primary care practitioner; and
   2. A screener shall perform the hearing screening on the student no earlier than 30 days and no later than 45 days from the date the screener finds the condition.

C. If a student does not pass a second hearing screening or does not complete a second hearing screening within the time period required under R9-13-104(B), a school administrator shall provide to the student's parent, within 10 days from the date of the second hearing screening or from the date the period for completing a second hearing screening ends, a referral to have the student's current hearing status evaluated by one of the following:
   1. An audiologist, a physician, or a primary care practitioner if the screener used only the four-frequency, pure tone hearing screening method;
   2. A physician or primary care practitioner if the student did not pass the tympanometry portion, but passed the three-frequency, pure tone portion of the hearing screening;
   3. An audiologist if the student did not pass the three-frequency, pure tone portion, but passed the tympanometry portion of the hearing screening; or
   4. An audiologist, a physician, or a primary care practitioner if the screener used the otoacoustic emissions hearing screening method.

D. A referral identified in subsection (C) is not required if a school-provided audiologist:
   1. Assesses a student's hearing status and the condition of the middle ear at the conclusion of a hearing screening; and
   2. Within 10 days from date of the assessment, provides the student's parent with a written diagnosis and recommendation for treatment, if applicable.

E. A referral required under subsections (A), (B), or (C), shall include a form requesting the following:
1. The name, address, and telephone number of the student evaluated;
2. The date of evaluation;
3. An assessment of the condition of the outer ear, if applicable;
4. An assessment of hearing status and the condition of the middle ear, if applicable;
5. A diagnosis and recommendation for treatment, if applicable;
6. The signature and title of the individual evaluating the student and completing the form; and
7. A request that the individual completing the form or the student's parent return the completed form to the school.

F. Under State Board of Education rule R7-2-401, a school administrator shall ensure that a student referred under subsections (A) or (C) is evaluated.

G. If a school receives notice of a diagnosis that a student is deaf or hard of hearing from an audiologist, the school administrator shall notify, within 10 days from the date the notice of diagnosis is received, each of the student's teachers and the person responsible for the school's special education services of the diagnosis.

R9-13-106. ~~Follow-up Requirements~~ Repealed

~~**A.** The school shall request that a child's parent or legal guardian return the otologic report form to the school subsequent to the child's medical examination.~~

~~**B.** The school nurse or other person responsible for the school hearing program shall inform the classroom teachers of the presence of students who have documented hearing loss.~~

~~**C.** The parent, legal guardian, school nurse, audiologist, physician, or other consultants, including a speech pathologist, a school psychologist, or a staff member of the HCP may request that a child with documented hearing loss be referred for evaluation for special education placement and services in accordance with the State Board of Education rule A.A.C. R7-2-401 (Special Education Standards for Public Schools and State-supported Institutions).~~

~~**D.** The local education agency shall be responsible for audiological evaluations for students enrolled in special education services or under evaluation for special education services in accordance with the State Board of Education rule A.A.C. R7-2-401 (Special Education Standards for Public Schools and State-supported Institutions).~~

R9-13-107. ~~Personnel Requirements for Screening~~ Screener Qualifications

~~**A.** Aides may perform initial pure-tone screening under the direct supervision of an audiologist, speech-language pathologist, or an individual who has completed an HCP certification course.~~

~~**B.** Threshold testing and tympanometry shall be performed only by an audiologist, speech-language pathologist, or an individual who has completed an HCP certification course.~~

A. An audiologist may perform a hearing screening.

B. An individual who is not an audiologist may perform a hearing screening only if the individual passes a hearing screener course that:
1. Includes 90 minutes of classroom instruction in the introduction to hearing covering:
   a. Development of speech and language;
   b. Anatomy and physiology of the ear;
   c. Signs and prevention of hearing loss in children; and
   d. A.R.S. Title 36, Chapter 7.2 and 9 A.A.C. 13, Article 1;
2. Includes 120 minutes of classroom instruction in hearing screening covering:
   a. Auditory development,
   b. Early identification of hearing loss,
   c. Principles of hearing screening,
   d. Selection of hearing screening methods, and
   e. Components of setting-up a hearing screening program;
3. Includes 75 minutes of classroom instruction in referral and reporting covering:
   a. Results of a hearing screening,
   b. Responses to a hearing screening outcome,
   c. Procedures for recording and tracking,
   d. Communication with parents,
   e. Role of community resources, and
   f. Reporting hearing screening results;
4. For an individual who will perform a hearing screening using three-frequency or four-frequency, pure tone hearing screening, includes 120 minutes of classroom instruction covering:
   a. Selecting and setting-up a hearing screening site,
   b. Performing a pure tone hearing screening, and
   c. Identifying children who need referral and evaluation;
5. For an individual who will perform a hearing screening using tympanometry with three-frequency, pure tone hearing screening, includes 60 minutes of classroom instruction covering:

a. The anatomy and functions of the middle ear,
b. What tympanometry measures and identifies,
c. Using a tympanometer,
d. Performing a tympanometry hearing screening, and
e. Identifying children who need referral and evaluation;

6. For an individual who will perform a hearing screening using otoacoustic emissions hearing screening, includes 60 minutes of classroom instruction covering:
   a. What otoacoustic emissions identify and measure,
   b. Using otoacoustic emissions equipment,
   c. Performing an otoacoustic emissions hearing screening, and
   d. Identifying children who need referral and evaluation;
7. Requires an individual to pass the course by scoring 80% or more on an examination that tests what the individual has learned;
8. Is taught by an individual who:
   a. Is an audiologist, or
   b. Meets the screener qualifications in subsection (B) or (C) and has performed at least 50 hearing screenings within 24 months before teaching a hearing screener course; and
9. Provides an individual who passes the course with a certificate of completion that includes:
   a. The individual's name;
   b. Whether the following were completed:
      i. Introduction to hearing,
      ii. Hearing screening,
      iii. Referral and reporting,
      iv. Pure tone hearing screening,
      v. Tympanometry hearing screening, and
      vi. Otoacoustic emissions hearing screening;
   c. An attestation that the course meets the requirements in subsection (B) or (C); and
   d. The name and signature of the individual who taught the course.

C. Every five years after completing a hearing screener course described in subsection (B), a screener who is not an audiologist shall pass a hearing screener course that:
1. Includes 195 minutes of classroom instruction covering the material required under subsections (B)(1), (B)(2), and (B)(3);
2. For an individual who will perform a hearing screening using three-frequency or four-frequency, pure tone hearing screening, includes 60 minutes of classroom instruction covering the material required under subsection (B)(4);
3. For an individual who will perform a hearing screening using tympanometry with three-frequency, pure tone hearing screening, includes 30 minutes of classroom instruction covering the material required under subsection (B)(5);
4. For an individual who will perform a hearing screening using otoacoustic emissions hearing screening, includes 30 minutes of classroom instruction covering the material required under subsection (B)(6); and
5. Meets the requirements in subsections (B)(7), (B)(8), and (B)(9).

D. Before performing a hearing screening, an individual who passes a hearing screener course described in subsection (B) or (C) shall give a copy of the certificate of completion described in subsection (B)(9) to the school.

E. An individual who does not meet the screener qualifications in subsection (A), (B), or (C) may perform a four-frequency, pure tone hearing screening, other than a second hearing screening required under R9-25-104(B), only under the supervision of an individual who meets the screener qualifications in subsection (A), (B), or (C).

R9-13-108. Equipment Standards

~~**A.** For pure-tone testing, the pure-tone audiometer and the pure-tone component of an acoustic impedance meter shall be calibrated to ANSI standards which are set forth in The American National Standard Specification for Audiometers, ANSI S3.6-1989, Standards Secretariat, c/o Acoustical Society of America, 335 East 45th Street, New York, New York 10017-3483, incorporated herein by reference and on file with the Office of the Secretary of State.~~

~~**B.** If tympanometry is included in the testing protocol, the acoustic impedance meter shall be equipped with either a calibration test cavity or programmed to self-calibrate. The acoustic impedance meter shall be calibrated on a daily basis, shall have an air pressure range of +200 mm to -300 mm H20, and shall utilize a low frequency probe tone of 220 to 300 Hz.~~

~~**C.** Each audiometer or acoustic impedance meter shall have a complete calibration check annually as follows:~~
~~1. The check for audiometers shall meet the ANSI standards set forth in subsection (A).~~
~~2. The check for acoustic impedance meters shall be performed according to manufacturer's specifications. If there is an audiometer component to the acoustic impedance meter, that component shall be tested in accordance with the requirements of subsection (A) for pure-tone audiometers.~~
~~3. Listening checks of the audiometers shall be made each day they are used and each time they are moved to a different location. The listening checks shall assure the following:~~

~~a. Power source and power indicator lights are working,~~
~~b. Earphone cords are free of breaks and loose connections,~~
~~c. All test frequencies are present at screening levels as specified in R9-13-103(A)(1),~~
~~d. Earphones are free of crossover of the signal to the opposite earphone, and~~
~~e. Earphones are free of any extraneous noise or distortion that may interfere with the screening.~~

~~4. Acoustic impedance meters shall comply with the following:~~
~~a. Test cavity calibration checks shall be performed daily per manufacturer's specifications before initial testing and each time that the unit is moved.~~
~~b. Routine inspections for obstruction in the probe unit shall be performed prior to testing each child.~~
~~c. If the acoustic impedance meter contains a pure-tone component, a listening check shall be performed as outlined in paragraph (3).~~

~~**D.** If equipment is not found to meet minimum standards outlined above, it shall not be used for testing.~~

A. A school administrator shall ensure that a pure tone audiometer used to perform a three-frequency or four-frequency, pure tone hearing screening is:
1. Calibrated every 12 months according to the American National Standard Specification for Audiometers, S3.6-1996, Standards Secretariat, c/o Acoustical Society of America, 120 Wall Street, 32nd Floor, New York, New York 10005-3993, January 12, 1996, incorporated by reference in R9-16-209(B)(1); and
2. Inspected within 24 hours before use to ensure that:
   a. The calibration complies with subsection (A)(1),
   b. The power source and power indicator are working,
   c. The earphone cords are securely connected and have no breaks,
   d. Each frequency and intensity required under R9-13-103(C)(1) is present,
   e. A signal does not cross from one earphone to the other, and
   f. Each earphone is free of noise or distortion that could interfere with a hearing screening.

B. A school administrator shall ensure that a tympanometer used to perform the tympanometry portion of a hearing screening:
1. Is calibrated every 12 months according to the American National Standard Specifications for Instruments to Measure Aural Acoustic Impedance and Admittance, S3.39-1987, Standards Secretariat, Acoustical Society of America, 335 East 45th Street, New York, New York 10017-3483, October 5, 1987, not including any later amendments or editions, incorporated by reference and on file with the Department and the Office of the Secretary of State; and
2. Is inspected within 24 hours before use to ensure that the calibration complies with subsection (B)(1).

C. A school administrator shall ensure that otoacoustic emissions equipment used to perform an otoacoustic emissions hearing screening is:
1. Calibrated every 12 months according to manufacturer's specifications; and
2. Inspected within 24 hours before use to ensure that:
   a. The calibration complies with manufacturer's specifications,
   b. No obstruction is in the probe microphone, and
   c. The test signal is present.

R9-13-109. Recordkeeping, Reporting Requirements

~~**A.** The result of each child's hearing test shall be recorded on the school or health record together with the date of the test and the child's grade, or age equivalent.~~

~~**B.** By June 30th of each year, each school shall submit a written report of the school year's HCP results to the Director utilizing forms prescribed by the Department. The report shall include the number of students classified into the following categories:~~
~~1. Screened initially;~~
~~2. Failed the first screening;~~
~~3. Received the second screening;~~
~~4. Failed the second screening and were given:~~
~~a. Threshold test,~~
~~b. Medical referrals,~~
~~c. Medical examinations,~~
~~d. Audiological referrals,~~
~~e. Audiological examinations,~~
~~f. Hearing aid evaluations, and~~
~~g. Special education evaluations; and~~
~~5. Wore hearing aids.~~

~~**C.** By June 30th of each year, each school shall report the name of the person responsible for administering the hearing screening program to the Director along with a copy of that person's HCP training course certificate or Certificate of Clinical Competence in audiology or speech-language pathology.~~

A. A school administrator shall retain, for Department review and inspection, a written record of:
1. The date and results of a student's hearing screening for no less than three complete school years beginning on the first July 1 after the student's last date of attendance at the school, and
2. All calibration dates for a piece of hearing screening equipment currently used in the school.

B. By June 30th of each year, a school administrator shall submit to the Department the following information for the school year ending that June 30th:
1. On a form available from the Department, the number of students by grade in each of the following categories:
   a. Were enrolled at the time of a first hearing screening,
   b. Did not have a first hearing screening under R9-13-102(C),
   c. Had a first hearing screening,
   d. Did not pass a first hearing screening,
   e. Had a second hearing screening,
   f. Did not pass a second hearing screening,
   g. Were evaluated by an audiologist,
   h. Were evaluated by a physician or a primary care practitioner,
   i. Were first diagnosed as deaf or hard of hearing during the current school year, and
   j. Were diagnosed as deaf or hard of hearing during a prior school year; and
2. The name of each individual who performed a hearing screening in the school and:
   a. The individual's license number to practice audiology, or
   b. Evidence that the individual successfully completed a hearing screening course described in R9-13-107(B) or (C).

NOTICE OF FINAL RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 22. ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM (AHCCCS) ADMINISTRATION

PREAMBLE

1. Sections Affected — **Rulemaking Action**

R9-22-101	Amend
R9-22-107	Amend
R9-22-503	Repeal
R9-22-702	Amend
R9-22-703	Amend
R9-22-704	Amend
R9-22-707	Amend
R9-22-711	Amend
R9-22-713	Amend
R9-22-720	New Section

2. The specific authority for the rulemaking, including both the authorizing statute (general and the statutes the rules are implementing (specific):

Authorizing statute: A.R.S. § 36-2903.01

Implementing statutes: A.R.S. §§ 36-2903, 36-2904, and 36-2906

3. The effective date of the rules:

July 15, 2002

4. A list of all previous notices appearing in the Register addressing the final rule:

Notice of Rulemaking Docket Opening: 7 A.A.R. 5261, November 23, 2001

Notice of Proposed Rulemaking: 8 A.A.R. 1144, March 22, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Federal and State Policy Administrator

Address: 801 E. Jefferson
Mail Drop 4200
Phoenix, AZ 85034

Telephone: (602) 417-4198

Fax: (602) 256-6756

6. An explanation of the rule, including the agency's reasons for initiating the rule:

The Administration made changes to 9 A.A.C. 22 to conform to state statute, federal law, and to provide additional clarity and conciseness to existing rule language. These changes impact three Articles:

- Article 1, Definitions (R9-22-101 and R9-22-107) to add and amend definitions,
- Article 5, General Provision And Standards (R9-22-503, Reinsurance) to repeal a Section, and
- Article 7, Standards For Payments (R9-22-702 through R9-22-704; R9-22-707, R9-22-711, R9-22-713 and R9-22-720) to add and amend language.

Following is an explanation of the changes:

9 A.A.C. 22, Article 1, Definitions

The Administration modified, added, or deleted definitions to improve the clarity and conciseness of the rule language.

9 A.A.C. 22, Article 5, General Provision And Standards

R9-22-503. The Administration repealed this Section and relocated "Reinsurance" to Article 7, R9-22-720.

9 A.A.C. 22, Article 7, Standards For Payments

R9-22-702. The Administration amended the language to improve the clarity and conciseness of the rule.

R9-22-703. The Administration amended the language to comply with statutory changes (A.R.S. § 36-2904) and added language to make the rule more clear and understandable.

R9-22-704. The Administration amended the language to improve the clarity and conciseness of the rule.

R9-22-707. The Administration amended the language to comply with statutory changes and to make the rule more clear, concise, and understandable.

R9-22-711. The Administration amended the language to comply with statutory changes and to make the rule more clear, concise, and understandable.

R9-22-713. The Administration amended the language to conform to federal law (subsection (A)); make the language more clear and understandable and deleted subsection (B) as it is covered in subsection (C) and in contract.

R9-22-720. The Administration drafted new language for former R9-22-503, "Reinsurance". The new language conforms to statutory requirements.

7. A reference to any study that the agency relied on in its evaluation of or justification for the proposed rule and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

Not applicable

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

The contractors, members, providers, and AHCCCS are nominally impacted by the changes to the rule language. These rules define specific facets of Standards for Payment for the AHCCCS acute care program. The Administration is amending these rules to conform to state statute and federal law and make the rules more clear, concise, and understandable by:

- Grouping like concepts to provide clarity and conciseness to the rule language, and
- Clarifying language that does not clearly present policies or procedures.

As of May 2002, there are 680,813 acute care members, 33,989 long term care members and 48,212 KidsCare members. All three populations are impacted by changes in this rule package. There are 18 contractors from which the member may choose dependent on the program within which they are enrolled. Native American members may opt for the Indian Health Service system rather than a contractor.

R9-22-503 was repealed and R9-22-720 was established to address reinsurance. Financial terms for the contractor is now addressed in contract rather than rule. Computations and percentages have been incorporated in contract.

R9-22-703 was amended to reflect statute and federal law regarding six months and twelve months time-frames for submission and payment of claims. Using the six/twelve month time-frames has been in force since October 1999. The change benefits the providers as providers now receive payments sooner.

The amendments are primarily made to make the rules more clear, concise, and understandable. Nominal impact is anticipated. The small business community as a whole is not impacted by the clarifications. All affected entities benefit from the additional clarity and conciseness of the rule language. AHCCCS and contractors are directly affected by and benefit from the clarifications.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

1.	General	The Administration made the rules more clear, concise, and understandable by making grammatical, verb tense, punctuation, and structural changes throughout the rules.
2.	General	The Administration made other technical and grammatical changes based on suggestions from G.R.R.C. staff.
3.	R9-22-101(B)	The Administration amended the definition of "AHCCCS registered provider" to make the language more clear, concise, and understandable based on comments received from Gammage & Burnham and the Arizona Hospital and Health care Association (AzHHA) through its attorneys.
4.	R9-22-702(A)	The Administration amended this subsection to make the language more clear, concise, and understandable based on comments received from Gammage & Burnham.
5.	R9-22-702(B)	The Administration amended this subsection to clarify the provisions regarding third-party payments.
6.	R9-22-703(A)(1)	The Administration has amended the language to include language regarding electronic claims.
7.	R9-22-703(C)(1)	The Administration amended the subsection to make it more clear, concise and understandable.
8.	R9-22 703(D)(2)	The Administration added language to this subsection to clarify that a recoupment of an overpayment shall be documented on a remittance advice.
9.	R9-22-703(E)(1)(b)	The Administration has amended the language by deleting the word emergency.
10.	R9-22-704(A)	The Administration amended the language to align with federal regulations.
11.	R9-22-704(C)(2)	The Administration amended the language to align with federal regulations.
12.	R9-22-713(A)(2)	The Administration amended the subsection to make the language more clear, concise, and understandable.
13.	R9-22-713(B) and (C)	The Administration amended these subsections to make the language more clear, concise, and understandable.

11. A summary of the principal comments and the agency response to them:

#	Subsection	Comment	Response or Change
1	R9-22-101(B)	In the definition of "AHCCCS Registered Provider" the reference to A.R.S. § 36-2904 is unnecessary and circular. The only reference to provider agreements in that statute is in subsection E, which states merely that reimbursement, shall be made only to providers who have a provider agreement and who have agreed to the agreement (a circular statement in itself). **(Gammage & Burnham)** The reference in the proposed rule to "federal requirements" should read, Federal requirements as set forth in 42 CFR 431.107" as 42 CFR 431.107 explicitly enumerates the federal requirements for provider agreements We object to the vague and undefined reference to "state requirements". This reference should be deleted. Any explicit state regulation should be detailed in the regulation itself, in the same manner that the federal regulation details the federal requirements for provider agreements. The only state requirements we believe are necessary are that the provider execute a provider agreement and meet the license or certification requirements to provide AHCCCS covered services. **(AzHHA through its attorneys)**	**Disagree with the deletion of A.R.S. citation** The Administration is not limited to those items listed in the CFR and therefore retains the A.R.S. citation because the citation gives AHCCCS the authority to require providers to sign the provider agreement. **Agree** The Administration has amended the language as follows: "… Meets license or certification requirements to provide AHCCCS covered services."
2	R9-22-101(B)	The definition of "Remittance advice" should include remittance advices issued by the plans, and not those issued solely by the Administration. Not all plans adhere to the requirement of the AHCCCS contract that they advise providers why submitted claims were denied, adjusted, or pended. This should be a clear regulatory mandate. **(Gammage & Burnham)**	**Disagree** Remittance advice directives appropriately exist in contract and not rule according to A.R.S. § 41-1005(A)(16). The Administration also reviews the contractor claims process as part of the Operational and Financial Review. The Administration has agreed to further review Gammage & Burnham's issues regarding the content of some health plans' remittance advice documents.
3	R9-22-201(G)	Although Article 2 is not the subject of this rulemaking, R9-22-201(G), governing charging members for services, requires the provider to give advance notice to the patient of intent to charge for noncovered services and secure written consent. We urge the Administration to repeal this subsection or at least indicate that it does not apply to emergency services. **(Gammage & Burnham)**	The Administration will take this suggestion under advisement when this Section is opened as part of a rule package.

4	R9-22-702(A)	We do not understand the reference to "section B, under A.R.S. § 36-2903.01". We believe you might have meant, "section B of this section, and under A.R.S. § 36-2903.01". Please clarify. Section A essentially reenacts old language requiring a provider "receive verification" from the Administration that the person was ineligible "or that the services provided were not covered by AHCCCS" before billing the patient. This regulatory requirement as it pertains to verification that services are not covered has always been at odds with reality and should be corrected now that the regulations are being revised. There is no process of which we are aware for a provider to obtain timely "verification" that services are not covered. Unless the Administration intends to establish a cost-effective, rapid response system for such verification, the requirement should be deleted. Providers are also unable to comply with the rule when trying to determine eligibility for behavioral health services. AHCCCS refuses to verify behavioral health enrollment. Therefore a provider cannot receive verification through AHCCCS that a member is ineligible or that the services are not covered. Behavioral health enrollment should be made part of the eligibility verification system, or this Section modified in recognition that a provider may need to bill a patient to have the patient disclose eligibility. **(Gammage & Burnham)**	**Clarify language** Gammage & Burnham are correct. The Administration meant subsection (B). For clarity, the Administration has amended the language In accordance with A.R.S. § 36-2903.01(L), R9-22-702(A) directs the providers to verify AHCCCS eligibility-not whether or not a member qualifies for specific services, e.g. behavioral health coverage. Neither the statute nor the rule requires that the provider verify coverage for services as a prerequisite to billing members. Once eligibility for AHCCCS benefits is verified, providers may verify coverage for behavioral health services through ADHS.
5	R9-22-702(A)	Under R9-22-702(A), please check the reference to A.R.S. § 36-2903.01(B). If this is the correct citation, please explain how A.R.S. § 36-2903.01(B) creates an exception to the prohibition against billing a member. **(AzHHA through its attorneys)**	**Clarification** The intent of the language was to refer to subsection (B) in rule not in the statute. The Administration has clarified the language.
6	R9-22-702(B)	We suggest that AHCCCS clarify the provisions relating to third-party payments by revising the first sentence of R9-22-702(B)(3) to read as follows: "To recover from a member, or a person acting on behalf of a member, that portion of a payment made by a third party when the payment duplicates AHCCCS paid benefits and has not been assigned to a contractor under R9-22-1002(B)." **(AzHHA through its attorneys)**	**Agree** **3.**To recover from a member that portion of payment made by a third party to the member when the payment duplicates AHCCCS paid benefits and has not been assigned to a contractor under R9-22-1002(B)." An AHCCCS registered provider who makes a claim under this provision shall not charge more than the actual, reasonable cost of providing the covered service.

		In the second sentence the word "contractor" should be changed to "an AHCCCS registered provider" to be consistent with the introductory phrase of the Section. Paragraph 4 permits billing members "for expenses incurred during the period of time when the member intentionally withheld information…" The phrase "or a person acting on behalf of a member" should be inserted here as well. **(Gammage & Burnham)**	**Agree** The Administration has amended the language. **Disagree** **4.**The Administration believes that a member representative should neither be held responsible for the member's bills nor should the member be held responsible for a potential error made by the member representative. The phrase "or a person acting on behalf of a member" has been deleted from R9-22-702(B)(3) for consistency.
7	R9-22-703(A)(1)	We suggest that AHCCCS revise this subsection to read as follows in order to more fairly and accurately describe the obligations of the provider and the payer, and encourage the parties to transact claims and payments electronically: Under A.R.S. § 36-2904(H)(3), the Administration regards the claim as submitted on the date that it is received by the Administration or, for claims filed electronically, the date of transmission. The Administration shall do one or more of the following for each claim it receives: a. Place a date stamp on the face of the claim: b. Assign a system-generated claim reference number; or c. Assign a system-generated date-specific number. **(AzHHA through its attorneys)**	**Clarification** The Administration has amended the language as follows: Under A.R.S. § 36-2904(H)(3), the Administration regards <u>a paper or electronic</u> claim as submitted on the date that it is received by the Administration.~~or, for claims filed electronically, the date of transmission.~~ The Administration shall do one or more of the following for each claim it receives:
8	R9-22-703(A)(5)	This subsection is unnecessary in view of the statutory definition of a clean claim and strikes us as broader than the statute. It is therefore impermissible. In essence AHCCCS is saying a claim is clean when AHCCCCS decides it is. There is always more documentation or "information" that can be requested to justify not paying a claim. The paragraph should be deleted. (**Note:** letter from Gammage & Burnham reads R9-701(A)(5) but the comment does not apply to this Section. AHCCCS is assuming that the reference contains a typographical error and was intended to read R9-22-703(A)(5)) **(Gammage & Burnham)**	**Clarification** The Administration has amended the language as follows: <u>The claim is clean when it meets the requirements under A.R.S. § 36-2904(H).</u> AHCCCS chooses to cite s its authority regarding a clean claim. It is helpful to the public.
9	R9-22-703(B)(2)	We suggest this subsection reference 42 U.S.C. 1396a(a)(37), the timely payment statute that applies to a Medicaid agency, versus 42 U.S.C. 1396u-2 which applies to a Medicaid managed care organization.	**Agree** The Administration has amended the citation.

10	R9-22-703(B)(3)	This subsection is redundant of the statute and is therefore unnecessary. **(Gammage & Burnham)** (**Note:** letter from Gammage & Burnham reads R9-701(B)(3) but the comment does not apply to this Section. AHCCCS is assuming that the reference contains a typographical error and was intended to read R9-22-703(B)(3)) This subsection should also incorporate language from 42 U.S.C. 1396a(a)(37) that describes when a claim is clean for purposes of timely processing under federal law. To accomplish this, R9-22-703(B)(3) should read as follows: For purposes of timely claims processing, a clean claim is valid if no further written information or substantiation is required in order to make a payment. **(AzHHA through its attorneys)** (**Note:** The letter from AzHHA reads "R9-22-70**5**(B)(3) but that Section is not open nor does it apply. AHCCCS is assuming that the reference contains a typographical error and is intended to read R9-22-703(B)(3))	**Agree** with Gammage & Burnham **Disagree** This subsection is redundant of the statute and has been deleted.
11	R9-22-703(C)	We believe this inaccurately characterizes the obligations and procedures regarding overpayments; we suggest that AHCCCS revise this subsection to read as follows: C. Overpayments for AHCCCS services. 1. An AHCCCS registered provider shall notify the Administration when the provider discovers an overpayment was made by the Administration. 2. The Administration shall recoup an overpayment from a future claim cycle unless the AHCCCS registered provider returns the overpayment to the Administration **(AzHHA through its attorneys)**	**Agree** The Administration has amended the language of (C)(1) as requested and has amended (C)(2) to include (C)(3).
12	R9-22-703(D)	We suggest that AHCCCS revise this subsection to read as follows: D. Postpayment claims review. 1. The Administration shall conduct postpayment review of claims paid by the Administration to determine if monies have been erroneously paid to an AHCCCS registered provider. 2. The Administration shall recoup any overpayment from a future claim cycle unless the AHCCCS registered provider returns the overpayment to the Administration. 3. The Administration shall document any recoupment of an overpayment on a remittance advice. 4. An AHCCCS registered provider may file a grievance or request for hearing under Article 8 of this Chapter if the AHCCCS registered provider disagrees with the recoupment action. **(AzHHA through its attorneys)**	**Agree** The Administration has amended (D)(1)(a) to include (D)(1)(b). The Administration has added #3 of the suggested language to this subsection as #2.

13	R9-22-703(E)(1)(b)	This subsection is inconsistent with R9-22-201 and R9-22-210 which state that emergency services do not require prior authorization or notice. AHCCCS rule R9-22-204(B)(2)(c) provides grace periods of one and three days for inpatient services provided on an emergency basis before the provider must contact AHCCCS. Since federal law makes no distinction between emergency services and emergency admissions, AHCCCS has no authority to do so and should eliminate any reference to notification for emergency admissions under R9-22-703. **(AzHHA through its attorneys, and Gammage & Burnham)** (**Note:** letter from Gammage & Burnham reads R9-701(E)(b) but the comment does not apply to this Section. AHCCCS is assuming that the reference contains a typographical error and was intended to read R9-22-703(E)(1)(b))	**Agree** The Administration has amended the language by deleting the word "emergency".
14	R9-22-703(E)(3)	Behavioral health claims should not pend for medical review or post-payment review per federal requirement on confidentiality. **(AZ Department of Health Services)**	**Clarification** The Administration is the third party administrator for the payment of Tribal Regional Behavioral Health Authority (TRBHA) claims for AZ. Department of Health Services (ADHS). The Administration does not pend these claims for medical review. This is a moot point.
15	R9-22-703(E)(5)	This subsection should be modified to also require processing of claims in accordance with tier hierarchy rules, if at variance with authorization. We persistently see claims, billed at surgery tier, reduced to routine tier based on prior authorization (issued when the surgery had not yet occurred), when the claim and accompanying medical documentation clearly supports surgery tier. This will occasionally happen with maternity claims as well. These claims are clean and properly billed under the statute, the Administration does not need additional information to process the claim accurately. Payments to hospitals are needlessly delayed by having prior authorization as the sole driver of payment, when the face of the claim billed in accordance with regulatory requirements and required medical records mandates alternate payment. **(Gammage & Burnham)** (**Note:** letter from Gammage & Burnham reads R9-701(E)(5) but the comment does not apply to this Section. AHCCCS is assuming that the reference contains a typographical error and was intended to read R9-22-703(E)(5))	**Disagree** The Administration believes that this is an internal systems issue and will pursue investigation of the issue presented. The Administration will work with Gammage & Burnham on specific issues as well.

16	R9-22-704(A)	Under the definition of business agent in subsection R9-22-704(A) we suggest that AHCCCS replace "behalf" with "the name", so that the AHCCCS definition follows federal regulation that defines a business agent as one that bills or receives payment "in the name of the provider". (See 42 CFR 447.10(f)) **(AzHHA through its attorneys)**	**Agree** The Administration has amended the language.
17	R9-22-704(B)(2)(a)	We suggest that AHCCCS delete the word "Reasonably", because the adjective is not in the federal regulation and because it is vague and ambiguous. **(AzHHA through its attorneys)**	**Agree** The Administration has amended the language by deleting the word "reasonably".
18	R9-22-704(C)(2)	We suggest that AHCCCS replace "bills or receives payment" with "submits the claim" to ensure consistency with 42 CFR 447.10(g). Similarly, we suggest that AHCCCS add the following, since it appears in 42 CFR 447.10(g): To the facility in which the service is provided, if there is a contractual relationship between the facility and the person furnishing the services under which the facility submits the claim for such services. **(AzHHA through its attorneys)**	**Agree** The Administration has amended the language.
19	R9-22-705(C)	In light of the changes suggested for R9-22-703, AHCCCSA should use this rule package to change R9-22-705(C). **(AzHHA through its attorneys)**	R9-22-705 is not open with this rule package. The Administration will take this suggestion under consideration when R9-22-705 is opened.
20	R9-22-711(A)	There is no reference to behavioral health for copayments. **(AZ Department of Health Services)**	**Clarification** Collection of copayments are limited to those listed in the rule which are established by state plan and waiver.
21	R9-22-713(A)	We object to two aspects of this subsection. First, the statutory authority for this rule in no way predicates AHCCCS making payments on behalf of a contractor on the need to prevent a suspension or termination of AHCCCS services. The authority to make payment is discretionary, but it applies simply "if a contractor fails to make timely payment to a hospital." A.R.S. § 36-2903.01(J). Accordingly, R9-22-713(A) should read as follows: The Administration may make payments on behalf of a contractor if a contractor fails to make timely payment when: We also object to extending from 60 until 90 days the time period before which AHCCCS may consider making payment on behalf of a contractor. AHCCCS must hold its health plans accountable for timely and accurate reimbursement and have the authority to make payments on behalf of the health plans in a timely fashion. Failure to do so may exacerbate the financial challenges AzHHA members face treating the indigent and uninsured. **(AzHHA through its attorneys)**	**Disagree** The Administration has general authority under A.R.S. § 36-2903(M) to address suspension or termination of AHCCCS service issues. Statute grants AHCCCS the discretion regarding making payments on behalf of a contractor. AHCCCS is also given authority to make payments to a hospital if a contractor does not make payment. Given this authority, AHCCCS does not believe that A.R.S. § 36-2903(J) can be reasonably read as mandating payment to hospitals in all circumstances where a contractor does not make payments. The federal Balanced Budget Act allows a contractor 90 days to pay 99% of valid clean claims from the date of receipt of a claim. The Administration is using its discretion to align the rule time-frame with the federal time allowed for payment.

		R9-22-713(A)(2) should read, "when a contractor does not adjudicate 99% of valid accrued claims within 90 days of receipt from the AHCCCS registered provider whichever time-frame is longer". **(AZ Department of Health Services)**	**Agree** The Administration has amended the language in substantially the manner requested.
22	R9-22-713(B) and (C)	We suggest that AHCCCS clarify the rule on remission of overpayments in two ways. First we suggest that proposed rule R9-22-713(B) (found currently at 713(C)) provide for the remission of funds to the Administration "if a contractor or a subcontracting provider receives an overpayment from the Administration or otherwise becomes indebted to the Administration…". In addition, the linkage between R9-22-713(C) and (B) in the proposed rule is not clear, so we suggest that R9-22-713(C) read as follows: If the funds described in subsection B are not remitted, the Administration may recover an overpayment paid by the Administration to a contractor or subcontracting provider through: **(AzHHA through its attorneys)**	**Agree** The Administration has amended the language.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rules:

Description	Date	Location
42 CFR 431.107(b)	April 6, 1992	R9-22-703
42 CFR 447.45	Feb. 15,1990	R9-22-703

14. Was this rule previously adopted as an emergency rule?

No

15. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

CHAPTER 22. ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM (AHCCCS) ADMINISTRATION

ARTICLE 1. DEFINITIONS

Section
R9-22-101. Location of Definitions
R9-22-107. Standard for Payments Related Definitions

ARTICLE 5. GENERAL PROVISIONS AND STANDARDS

Section
R9-22-503. ~~Reinsurance~~ Repealed

ARTICLE 7. STANDARDS FOR PAYMENTS

Section
R9-22-702. Prohibitions Against Charges to Members ~~or Eligible Persons~~
R9-22-703. Claims Submission to the Administration
R9-22-704. Transfer of ~~payments~~ Payments
R9-22-707. Payments for Newborns
R9-22-711. Copayments
R9-22-713. ~~Payments made on behalf of a contractor; recovery of indebtedness~~ Payments Made on Behalf of a Contractor; Recovery of Indebtedness
R9-22-720. Reinsurance

ARTICLE 1. DEFINITIONS

R9-22-101. Location of Definitions

A. Location of definitions. Definitions applicable to this Chapter are found in the following:

Definition	Section or Citation
"Accommodation"	R9-22-107
"Act"	R9-22-114
"Active case"	R9-22-109
"ADHS"	R9-22-112
"Administration"	A.R.S. § 36-2901
"Administrative law judge"	R9-22-108
"Administrative review"	R9-22-108
"Advanced Life Support" or "ALS"	R9-25-101
"Adverse action"	R9-22-114
"Affiliated corporate organization"	R9-22-106
"Aged"	42 U.S.C. 1382c(a)(1)(A) and R9-22-115
"Aggregate"	R9-22-107
"AHCCCS"	R9-22-101
"AHCCCS inpatient hospital day or days of care"	R9-22-107
"AHCCCS registered provider"	R9-22-101
"Ambulance"	~~A.R.S. Title 36, Chapter 21.1~~ A.R.S. § 36-2201
"Ancillary department"	R9-22-107
"Annual assessment period"	R9-22-109
"Annual assessment period report"	R9-22-109
"Annual enrollment choice"	R9-22-117
"Appellant"	R9-22-114
"Applicant"	R9-22-101
"Application"	R9-22-101
"Assignment"	R9-22-101
"Attending physician"	R9-22-101
"Authorized representative"	R9-22-114
"Auto-assignment algorithm"	R9-22-117
"Baby Arizona"	R9-22-114
"Basic Life Support" or "BLS"	R9-25-101
"Behavior management services"	R9-22-112
"Behavioral health evaluation"	R9-22-112
"Behavioral health medical practitioner"	R9-22-112
"Behavioral health professional"	R9-20-101
"Behavioral health service"	R9-22-112
"Behavioral health technician"	R9-20-101
"Behavior management services"	R9-22-112
"BHS"	R9-22-114
"Billed charges"	R9-22-107
"Blind"	R9-22-115
"Board-eligible for psychiatry"	R9-22-112
"Burial plot"	R9-22-114
"Capital costs"	R9-22-107
"Capped fee-for-service"	R9-22-101
"Caretaker relative"	R9-22-114
"Case"	R9-22-109
"Case record"	R9-22-109
"Case review"	R9-22-109
"Cash assistance"	R9-22-114
"Categorically-eligible"	R9-22-101
"Certified psychiatric nurse practitioner"	R9-22-112
"Clean claim"	A.R.S. § 36-2904
"Clinical supervision"	R9-22-112
"CMDP"	R9-22-117
"CMS"	R9-22-101
"Complainant"	R9-22-108

"Continuous stay"	R9-22-101
"Contract"	R9-22-101
"Contractor"	A.R.S. § 36-2901
"Copayment"	R9-22-107
"Corrective action plan"	R9-22-109
"Cost-to-charge ratio"	R9-22-107
"Covered charges"	R9-22-107
"Covered services"	R9-22-102
"CPT"	R9-22-107
"CRS"	R9-22-114
"Cryotherapy"	R9-22-120
"Date of eligibility posting"	R9-22-107
"Date of notice"	R9-22-108
"Day"	R9-22-101
"DCSE"	R9-22-114
"De novo hearing"	42 CFR 431.201
"Dentures"	R9-22-102
"Department"	A.R.S. § 36-2901
"Dependent child"	A.R.S. § 46-101
"DES"	R9-22-101
"Diagnostic services"	R9-22-102
"Director"	R9-22-101
"Disabled"	R9-22-115
"Discussions"	R9-22-106
"Disenrollment"	R9-22-117
"District"	R9-22-109
"DME"	R9-22-102
"DRI inflation factor"	R9-22-107
"E.P.S.D.T. services"	42 CFR 441 Subpart B
"Eligible person"	A.R.S. § 36-2901
"Emergency medical condition"	42 U.S.C. 1396b(v)(3)
"Emergency medical services"	R9-22-102
"Encounter"	R9-22-107
"Enrollment"	R9-22-117
"Enumeration"	R9-22-101
"Equity"	R9-22-101
"Experimental services"	R9-22-101
"Error"	R9-22-109
"FAA"	R9-22-114
"Facility"	R9-22-101
"Factor"	~~R9-22-101~~ 42 CFR 447.10
"FBR"	R9-22-101
"Fee-For-Service" or "FFS"	R9-28-101
"FESP"	R9-22-101
"Finding"	R9-22-109
"First-party liability"	R9-22-110
"Foster care maintenance payment"	42 U.S.C. 675(4)(A)
"Federal poverty level" ("FPL")	A.R.S. § 1-215
"FQHC"	R9-22-101
"Grievance"	R9-22-108
"GSA"	R9-22-101
"Health care practitioner"	R9-22-112
"Hearing"	R9-22-108
"Hearing aid"	R9-22-102
"Home health services"	R9-22-102
"Homebound"	R9-22-114
"Hospital"	R9-22-101
"Intermediate Care Facility for the Mentally Retarded" or "ICF-MR"	42 CFR 483 Subpart I

"ICU"	R9-22-107
"IHS"	R9-22-117
"IMD"	42 CFR 435.1009 and R9-22-112
"Income"	R9-22-114
"Inmate of a public institution"	42 CFR 435.1009
"Interested party"	R9-22-106
"LEEP"	R9-22-120
"License" or "licensure"	R9-22-101
"Mailing date"	R9-22-114
"Management evaluation review"	R9-22-109
"Medical education costs"	R9-22-107
"Medical expense deduction"	R9-22-114
"Medical record"	R9-22-101
"Medical review"	R9-22-107
"Medical services"	A.R.S. § 36-401
"Medical supplies"	R9-22-102
"Medical support"	R9-22-114
"Medically necessary"	R9-22-101
"Medicare claim"	R9-22-107
"Medicare HMO"	R9-22-101
"Member"	A.R.S. § 36-2901
"Mental disorder"	A.R.S. § 36-501
"New hospital"	R9-22-107
"Nursing facility" or "NF"	42 U.S.C. 1396r(a)
"NICU"	R9-22-107
"Noncontracting provider"	A.R.S. § 36-2901
"Nonparent caretaker relative"	R9-22-114
"Notice of Findings"	R9-22-109
"OAH"	R9-22-108
"Occupational therapy"	R9-22-102
"Offeror"	R9-22-106
"Ownership interest"	42 CFR 455.101
"Operating costs"	R9-22-107
"Outlier"	R9-22-107
"Outpatient hospital service"	R9-22-107
"Ownership change"	R9-22-107
"Partial Care"	R9-22-112
"Party"	R9-22-108
"Peer group"	R9-22-107
"Performance measures"	R9-22-109
"Pharmaceutical service"	R9-22-102
"Physical therapy"	R9-22-102
"Physician"	R9-22-102
"Prior period coverage" or "PPC"	R9-22-107
"Post-stabilization care services"	42 CFR 422.113
"Practitioner"	R9-22-102
"Pre-enrollment process"	R9-22-114
"Preponderance of evidence"	R9-22-109
"Prescription"	R9-22-102
"Primary care provider (PCP)"	R9-22-102
"Primary care provider services"	R9-22-102
"Prior authorization"	R9-22-102
"Private duty nursing services"	R9-22-102
"Proposal"	R9-22-106
"Prospective rates"	R9-22-107
"Prospective rate year"	R9-22-107
"Psychiatrist"	R9-22-112
"Psychologist"	R9-22-112
"Psychosocial rehabilitation services"	R9-22-112

"Qualified alien"	A.R.S. § 36-2903.03
"Quality management"	R9-22-105
"Radiology"	R9-22-102
"Random sample"	R9-22-109
"RBHA"	R9-22-112
"Rebasing"	R9-22-107
"Referral"	R9-22-101
"Rehabilitation services"	R9-22-102
"Reinsurance"	R9-22-107
"Remittance advice"	R9-22-107
"Resources"	R9-22-114
"Respiratory therapy"	R9-22-102
"Respondent"	R9-22-108
"Responsible offeror"	R9-22-106
"Responsive offeror"	R9-22-106
"Review"	R9-22-114
"Review period"	R9-22-109
"RFP"	R9-22-106
"Scope of services"	R9-22-102
"SDAD"	R9-22-107
"Section 1115 Waiver"	A.R.S. § 36-2901
"Service location"	R9-22-101
"Service site"	R9-22-101
"SESP"	R9-22-101
"S.O.B.R.A."	R9-22-101
"Specialist"	R9-22-102
"Specified relative"	R9-22-114
"Speech therapy"	R9-22-102
"Spendthrift restriction"	R9-22-114
"Spouse"	R9-22-101
"SSA"	42 CFR 1000.10
"SSI"	42 CFR 435.4
"SSN"	R9-22-101
"Stabilize"	42 U.S.C. 1395dd
"Standard of care"	R9-22-101
"Sterilization"	R9-22-102
"Subcontract"	R9-22-101
"Submitted"	A.R.S. § 36-2904
"Summary report"	R9-22-109
"SVES"	R9-22-114
"Third-party"	R9-22-110
"Third-party liability"	R9-22-110
"Tier"	R9-22-107
"Tiered per diem"	R9-22-107
"Title IV-D"	R9-22-114
"Title IV-E"	R9-22-114
"Tolerance level"	R9-22-109
"Utilization management"	R9-22-105
"WWHP"	R9-22-120

B. General definitions. In addition to definitions contained in A.R.S. § 36-2901, the words and phrases in this Chapter have the following meanings unless the context explicitly requires another meaning:

"AHCCCS" means the Arizona Health Care Cost Containment System, which is composed of the Administration, contractors, and other arrangements through which health care services are provided to a member.

"AHCCCS registered provider" means a provider or noncontracting provider who:

~~Has~~ Enters into a provider agreement with the Administration ~~under A.R.S. § 36-2904,~~ under R9-22-703(A); and
~~Meets state and federal requirements for providing covered services, and~~
~~Is appropriately licensed or certified to provide covered services.~~
Meets license or certification requirements to provide AHCCCS covered services.

"Applicant" means a person who submits or whose authorized representative submits, a written, signed, and dated application for AHCCCS benefits.

"Application" means an official request for AHCCCS medical coverage made under this Chapter.

"Assignment" means enrollment of a member with a contractor by the Administration.

"Attending physician" means a licensed allopathic or osteopathic doctor of medicine who has primary responsibility for providing or directing preventive and treatment services for a fee-for-service member.

"Capped fee-for-service" means the payment mechanism by which a provider of care is reimbursed upon submission of a valid claim for a specific AHCCCS-covered service ~~and~~ or equipment provided to a member. A payment is made in accordance with an upper, or capped, limit established by the Director.

"Categorically-eligible" means a person who is eligible under ~~A.R.S. §§ 36-2901(i)~~ A.R.S. §§ 36-2901(6)(a)(i), (ii), or (iii) and 36-2934.

"CMS" means the Centers for Medicare and Medicaid Services.

"Continuous stay" means the period during which a member receives inpatient hospital services without interruption beginning with the date of admission and ending with the date of discharge or date of death.

"Contract" means a written agreement entered into between a person, an organization, or other entity and the Administration to provide health care services to a member under A.R.S. Title 36, Chapter 29, and this Chapter.

"Day" means a calendar day unless otherwise specified.

"DES" means the Department of Economic Security.

"Director" means the Director of the Administration or the Director's designee.

"Eligible person" means a person as defined in A.R.S. § 36-2901.

"Enumeration" means the assignment of a specific nine-digit identification number to a person by the Social Security Administration.

"Equity" means the county assessor full cash or market value of a resource minus valid liens, encumbrances, or both.

"Experimental services" means services that are associated with treatment or diagnostic evaluation that meets one or more of the following criteria:

Is not generally and widely accepted as a standard of care in the practice of medicine in the United States;
Does not have evidence of safety and effectiveness documented in peer reviewed articles in medical journals published in the United States; or
Lacks authoritative evidence by the professional medical community of safety and effectiveness because the services are rarely used, novel, or relatively unknown in the professional medical community.

"Facility" means a building or portion of a building licensed or certified by the Arizona Department of Health Services as a health care institution, under A.R.S. Title 36, Chapter 4, to provide a medical service, a nursing service, or other health care or health-related service.

~~"Factor" means an organization, a collection agency, a service bureau, or a person who advances money to a provider for accounts receivable that the provider assigns, sells, or otherwise transfers, including transfers through the use of a power of attorney, to the organization, the collection agency, the service bureau, or the person that receives an added fee or a deduction of a portion of the face value of the accounts receivable in return for the advanced money. The term "factor" does not include a business representative, such as a bailing agent or an accounting firm described in this Chapter, or a health care institution.~~

"FBR" means Federal Benefit Rate, the maximum monthly Supplemental Security Income payment rate for a member or a married couple.

"FESP" means a federal emergency services program covered under R9-22-217, to treat an emergency medical condition for a member who is determined eligible under A.R.S. § 36-2903.03(D).

"FQHC" means federally qualified health center.

"GSA" means a geographical service area designated by the Administration within which a contractor provides, directly or through a subcontract, a covered health care service to a member enrolled with that contractor ~~of record~~.

"Hospital" means a health care institution that is licensed as a hospital by the Arizona Department of Health Services under A.R.S. Title 36, Chapter 4, Article 2, and certified as a provider under Title XVIII of the Social Security Act, as

amended, or is currently determined, by the Arizona Department of Health Services as the CMS designee, to meet the requirements of certification.

"License" or "licensure" means a nontransferable authorization that is awarded based on established standards in law, is issued by a state or a county regulatory agency or board, and allows a health care provider to lawfully render a health care service.

"Medical record" means all documents that relate to medical and behavioral health services provided to a member by a physician or other licensed practitioner of the healing arts and that are kept at the site of the provider.

"Medically necessary" means a covered service provided by a physician or other licensed practitioner of the healing arts ~~and~~ within the scope of practice under state law to prevent disease, disability, or other adverse health conditions or their progression, or prolong life.

"Medicare HMO" means a health maintenance organization that has a current contract with Centers for Medicare and Medicaid for participation in the Medicare program under 42 CFR 417(L).

"Referral" means the process by which a member is directed by a primary care provider or an attending physician to another appropriate provider or resource for diagnosis or treatment.

"Service location" means a location at which a member obtains a covered health care service provided by a physician or other licensed practitioner of the healing arts under the terms of a contract.

"Service site" means a location designated by a contractor as the location at which a member is to receive covered health care services.

"SESP" means state emergency services program covered under R9-22-217 to treat an emergency medical condition for a qualified alien or noncitizen who is determined eligible under A.R.S. § 36-2901.06.

"S.O.B.R.A." means Section 9401 of the Sixth Omnibus Budget Reconciliation Act, 1986, amended by the Medicare Catastrophic Coverage Act of 1988, 42 U.S.C. 1396a(a)(10)(A)(i)(IV), 42 U.S.C. 1396a(a)(10)(A)(i)(VI), and 42 U.S.C. 1396a(a)(10)(A)(i)(VII).

"Spouse" means a person who has entered into a contract of marriage, recognized as valid by Arizona.

"SSN" means social security number.

"Standard of care" means a medical procedure or process that is accepted as treatment for a specific illness, or injury, medical condition through custom, peer review, or consensus by the professional medical community.

"Subcontract" means an agreement entered into by a contractor with any of the following:

A provider of health care services who agrees to furnish covered services to a member;
A marketing organization; or
Any other organization or person who agrees to perform any administrative function or service for a contractor specifically related to securing or fulfilling the contractor's obligation to the Administration under the terms of a contract.

R9-22-107. Standard for Payments Related Definitions

In addition to definitions contained in A.R.S. § 36-2901, the words and phrases in this Chapter have the following meanings unless the context explicitly requires another meaning:

"Accommodation" means bed and board services provided to a patient during an inpatient hospital stay and includes ~~the cost of~~ all staffing, supplies, and equipment. The accommodation is semi-private except when the member must be isolated for medical reasons. Other types of accommodation include hospital routine medical/surgical units, intensive care units, and any other specialty care unit in which bed and board are provided.

"Aggregate" means the combined amount of hospital payments for covered services provided within and outside the service area.

"AHCCCS inpatient hospital day or days of care" means ~~the period of time beginning with the day of admission and includes~~ each day of an inpatient stay for ~~an eligible person~~ a member, beginning with the day of admission, including the day of death, but excluding the day of discharge, provided that all medical necessity and medical review requirements are met.

"Ancillary department" means the department of a hospital that provides ancillary services and outpatient services, ~~which are~~ as defined in the Medicare provider Reimbursement Manual.

"Billed charges" means charges that a hospital includes on a claim for providing hospital services to ~~an eligible person or~~ a member consistent with the rates and charges filed by the hospital with the Arizona Department of Health Services.

"Capital costs" means capital-related costs, ~~which are~~ as defined in the Medicare provider Reimbursement Manual, Chapter 28, such as building and fixtures, and movable equipment.

"Copayment" means a monetary amount, specified by the Director, that a member pays directly to a contractor or provider at the time covered services are rendered.

"Cost-to-charge ratio" means a hospital's costs for providing covered services divided by the hospital's covered charges for the same services.

"Covered charges" means billed charges that represent medically necessary, reasonable, and customary items of expense for AHCCCS-covered services that meet medical review criteria of the Administration or contractor.

"CPT" means current procedural terminology, the manual published and updated by the American Medical Association, which is a nationally accepted listing of descriptive terms and identifying codes for reporting medical services and procedures performed by physicians and provides a uniform language to accurately designate medical, surgical, and diagnostic services.

"Date of eligibility posting" means the date a member's eligibility information is entered into the AHCCCS pre-paid medical management information system (PMMIS).

"DRI inflation factor" means the Data Resources Inc., Health Care Financing Administration hospital input price index for prospective hospital reimbursement, which is published by DRI/McGraw-Hill.

"Encounter" means a record of medical service, submitted by a contractor and processed by AHCCCS, that is rendered by ~~a provider registered with AHCCCS~~ an AHCCCS registered provider to a member who is enrolled with the contractor on the date of service, and for which the contractor incurs ~~any~~ financial liability.

"ICU" means the intensive care unit of a hospital.

"Medical education costs" means direct hospital costs for intern and resident salaries, fringe benefits, program costs, nursing school education, and paramedical education, which are defined in the Medicare provider Reimbursement Manual, Chapter 28.

"Medical review" means a review involving clinical judgment of a claim or a request for a service before or after it is paid or rendered to ensure that services provided to ~~an eligible person or~~ a member are medically necessary covered services and that required authorizations are obtained by the provider. The criteria for medical review are established by the Administration or contractor based on medical practice standards that are updated periodically to reflect changes in medical care.

"Medicare claim" means a claim for Medicare covered services for ~~an eligible person or~~ a member with Medicare coverage.

"New hospital" means a hospital for which Medicare Cost Report (Health Care Finance Administration form-2552) data and claim and encounter data are not available for hospital rate development from any owner or operator of the hospital, during either the initial prospective rate year or rebasing.

"NICU" means the neonatal intensive care unit of a hospital that is classified as a Level II or Level III perinatal center by the Arizona Perinatal Trust.

"Operating costs" means an AHCCCS allowable accommodation and ancillary department hospital costs excluding capital and medical education costs.

"Outlier" means a hospital claim or encounter in which the ~~AHCCCS inpatient hospital days of care have operating costs per day that meet the criteria described in R9-22-712.~~ operating costs per day for an AHCCCS inpatient hospital stay meet the criteria described in R9-22-712.

"Outpatient hospital service" means a service provided in an outpatient hospital setting that does not result in an admission.

"Ownership change" means a change in a hospital's owner, lessor, or operator ~~as defined in~~ under 42 CFR 489.18(A).

"Peer group" means hospitals that share a common, stable, and independently definable characteristic or feature that significantly influences the cost of providing hospital services.

"PPC" means prior period coverage. PPC is the period of time, prior to the member's enrollment, during which a member is eligible for covered services. The time-frame is the first day of the month of application or the first eligible month, whichever is later, to the day a member is enrolled with a contractor.

"Prospective rates" means inpatient or outpatient hospital rates defined by the Administration in advance of a payment period and representing full payment for covered services excluding any quick-pay discounts, slow-pay penalties, ~~non-categorical discounts,~~ and first-and third-party payments regardless of billed charges or individual hospital costs.

"Prospective rate year" means the period from October 1 of each year to September 30 of the following year, except for the initial prospective rate year, which is between March 1, 1993, and September 30, 1994.

"Rebasing" means the process by which new Medicare Cost Report data (~~HCFA-2552~~ Health Care Finance Administration form-2552), and AHCCCS claim and encounter data are collected and analyzed to reset periodically the inpatient hospital tiered per diem rates or the outpatient hospital cost-to-charge ratios.

"Reinsurance" means a risk-sharing program provided by the Administration to contractors for the reimbursement of certain contract service costs incurred by a member ~~or eligible person~~ beyond a certain monetary threshold.

"Remittance advice" means an electronic or paper document submitted to an AHCCCS registered provider by the Administration to explain, as applicable:

How submitted claims were paid,
Why submitted claims were denied or adjusted,
Why submitted claims were pended, and
How to grieve the Administration's adverse action according to Article 8 of this Chapter.

"SDAD" means same day admit and discharge, which is a hospital stay with the admit and discharge occurring on the same calendar day.

"Tier" means a grouping of inpatient hospital services into levels of care based on diagnosis, procedure or revenue codes, peer group, or NICU classification level, or any combination of these items.

"Tiered per diem" means a payment structure in which payment is made on a per-day basis depending upon the tier into which an AHCCCS inpatient hospital day of care is assigned.

ARTICLE 5. GENERAL PROVISIONS AND STANDARDS

R9-22-503. ~~Reinsurance~~ Repealed

~~**A.** Contractor-acquired reinsurance. A contractor may obtain reinsurance for coverage of prepaid capitated members. A contractor shall not obtain reinsurance to reduce liability below 25% of the applicable deductible level during any AHCCCS contract year. This limitation does not apply to reinsurance obtained by a contractor to cover the cost of services provided by noncontracting providers and non providers to members under emergency circumstances.~~

~~**B.** Administration reinsurance. For purposes of the Administration's reinsurance program, the insured entity shall be a prepaid plan with which the Administration contracts. Only costs incurred during the contract year in which a member is enrolled with a contractor qualify for reinsurance. Any movement of a member from membership with 1 contractor to membership with another contractor shall be cause for resetting the deductible level unless resetting is waived by the Administration.~~

~~**C.** Coinsurance and deductibles for members.~~

~~1. Coinsurance. As stated in the contract, the Administration shall pay a percentage of costs in excess of the deductible level incurred in paying for covered inpatient hospital services and when applicable, nursing facilities and acute medical and psychiatric services approved by the Director.~~

~~2. Deductible. A contractor shall pay the deductible for members.~~

~~**D.** Computation of the deductible level. The deductible level shall be determined by the costs paid by the contractor, or the AHCCCS fee schedule, if the costs are paid under a subcapitated arrangement.~~

~~**E.** Amounts in excess of the deductible level shall be paid based upon costs paid by the contractor, minus the coinsurance unless the costs are paid under a subcapitated arrangement. In subcapitated cases, the Administration shall base reimbursement of reinsurance encounters on the calculated AHCCCS allowed amount minus Medicare/TPL payments and applicable quick pay discounts.~~

~~1. The contractor shall maintain evidence that costs incurred have been paid by the contractor before submitting reinsurance encounters. This information is subject to AHCCCS Administration review.~~

~~2. First- and 3rd-party collections shall be reflected by the contractor as reductions in the encounters submitted on a dollar-for dollar-basis.~~

~~3. Payments made by contractor-purchased reinsurance are not considered 1st- and 3rd- party collections for the purpose of Administration reinsurance.~~

~~**F.** Encounter submission. A contractor shall prepare, review, verify, certify, and submit, encounters for consideration to the Administration.~~

~~1. The contractor shall certify that the services listed were actually rendered, medically necessary, and within the scope of AHCCCS benefits.~~

~~2. The contractor shall submit encounters in the format prescribed by the Administration.~~

3. ~~The contractor shall initiate and evaluate an encounter for probable 1st- and 3rd- party liability before submitting the encounter for reinsurance consideration to the Administration, unless the encounter involves underinsured or uninsured motorist liability insurance, 1st- and 3rd- party liability insurance, or a tort-feasor.~~

~~**G.** Encounter processing. The Administration shall process reinsurance associated or related encounters submitted by a contractor.~~

1. ~~The Administration shall accept for processing only those encounters that are submitted directly by an AHCCCS contractor and that comply with the conditions in subsections (B), (C), (E), and (F).~~
2. ~~The Administration shall establish and maintain separate records of all reinsurance cases established and all payments and case reviews made to the contractor as a result of these cases.~~
3. ~~The Administration shall subject a contractor to utilization of services and other evaluative reviews of care provided to a member that result in a reinsurance case.~~

~~**H.** Payment of reinsurance cases. The Administration shall reimburse a contractor for costs incurred in excess of the applicable deductible level calculated according to the provisions of subsection (E) and R9-22-703(B)(2).~~

~~**I.** The Administration may limit reinsurance reimbursement to a lower or alternative level of care if the Director or designee determines that the less costly alternative could and should have been used by the contractor. A contractor whose reinsurance case is reduced or denied shall be notified in writing by the Administration. The notification shall include the cause for reduction or denial and describe the applicable grievance and appeal process available under Article 8 of this Chapter.~~

~~**J.** The Administration or its contractors may arrange special contractual reinsurance terms for catastrophic cases. Catastrophic cases include, but are not limited to organ and bone marrow transplants (excluding kidney and cornea transplants which are covered under regular reinsurance), and hemophiliac cases. The contractor shall notify the AHCCCS Administration when a member is identified for possible reimbursement of AHCCCS approved catastrophic cases. The determination of whether a case or type of case is catastrophic shall be made by the Director based on the following criteria:~~

1. ~~Severity of medical condition, including prognosis; and~~
2. ~~Average cost or average length of hospitalization and medical care, or both, in Arizona for the type of case under consideration.~~

ARTICLE 7. STANDARDS FOR PAYMENTS

R9-22-702. Prohibitions Against Charges to Members ~~or Eligible Persons~~

~~**A.** A contractor, subcontractor, or other provider of care or services shall not charge, submit a claim, demand, or otherwise collect payment from a member or eligible person, or a person acting on behalf of a member or eligible person, for any covered service except to collect an authorized co-payment or payment for additional services. A prepaid capitated contractor shall have the right to recover from a member that portion of payment made by a 3rd party to the member when the payment duplicates AHCCCS paid benefits and has not been assigned to the prepaid contractor. A prepaid capitated contractor who makes a claim under this provision shall not charge more than the actual, reasonable cost of providing the covered services.~~

~~**B.** A provider shall not bill or make any attempt to collect payment, directly or through a collection agency, from an individual claiming to be AHCCCS eligible without 1st receiving verification from the Administration that the individual was ineligible for AHCCCS on the date of service or that the services provided were not covered by AHCCCS.~~

~~**C.** A provider, including a noncontracting provider, may bill an eligible person for medical expenses incurred during a period of time when the eligible person willfully withheld material information from the provider or gave false information to the provider pertaining to the eligible person's AHCCCS eligibility or enrollment status that caused payment to be denied.~~

A. Except as provided in subsection (B), an AHCCCS registered provider shall not do either of the following, unless services are not covered or without first receiving verification from the Administration that the person was ineligible for AHCCCS on the date of service:

1. Charge, submit a claim to, demand or collect payment from a person claiming to be AHCCCS eligible; or
2. Refer or report a person claiming to be AHCCCS eligible to a collection agency or credit reporting agency.

B. An AHCCCS registered provider may charge, submit a claim to, demand or collect payment from a member as follows:

1. To collect an authorized copayment;
2. To pay for non-covered services;
3. To recover from a member that portion of a payment made by a third-party to the member if the payment duplicates AHCCCS paid benefits and is not assigned to a contractor under R9-22-1002(B). An AHCCCS registered provider that makes a claim shall not charge more than the actual, reasonable cost of providing the covered service; or
4. To bill a member for medical expenses incurred during a period when the member intentionally withheld information or intentionally provided inaccurate information pertaining to the member's AHCCCS eligibility or enrollment that caused the payment to the provider to be reduced or denied.

R9-22-703. Claims Submission to the Administration

~~**A.** Claims submission to contractors. A provider shall submit to a capitated contractor all claims for services rendered to a member enrolled with the capitated contractor, including services rendered during a prior period for which the capitated contractor is responsible.~~

~~**B.** Claims submission to the AHCCCS Administration.~~
~~1. A provider, noncontracting provider, or non provider shall ensure that a claim for covered services provided to an AHCCCS-eligible person is initially received by the AHCCCS Claims Administration not later than 9 months from the date of service or 9 months from the date of eligibility posting, whichever is later. The Administration shall deny a claim not received within the 9 month period from the date of service or 9 months from the date of eligibility posting, whichever is later. If a claim meets the 9 month limitation, the provider, noncontracting provider, or nonprovider shall file a clean claim which is received by the AHCCCS Claims Administration not later than 12 months from the date of service or 12 months from the date of eligibility posting, whichever is later.~~
~~2. Exceptions to the 9 month and 12-month rules are:~~
~~a. The Administration shall not consider a reinsurance claim for payment unless the claim is received by the AHCCCS Claims Administration not later than 9 months from the close of the contract year in which the claim is incurred or 9 months after the date of eligibility posting, whichever is later. If a claim meets the 9 month limitation, the contractor shall file a clean claim which is received by the AHCCCS Claims Administration not later than 12 months from the close of the contract year in which the claim is incurred or 12 months after the date of eligibility posting, whichever is later.~~
~~b. The 9 month deadline for an inpatient hospital claim begins on the date of discharge for each claim.~~
~~**C.** Claims processing.~~
~~1. If a claim contains erroneous or conflicting information, exceeds parameters, fails to process correctly, does not match the AHCCCS files, or requires manual review to be resolved, the Administration shall report the claim to the provider with a remittance advice.~~
~~2. The Administration shall process a hospital claim in accordance with R9-22-712.~~
~~**D.** Overpayments for AHCCCS services. When an AHCCCS overpayment is made to a provider, noncontracting provider, nonprovider, or contractor, the provider, noncontracting provider, nonprovider, or contractor shall notify AHCCCS that an overpayment was made. The Administration shall recoup an overpayment from a future claim cycle, or, at the discretion of the Director, require the provider, noncontracting provider, nonprovider, or contractor to return the incorrect payment to AHCCCS.~~

A. AHCCCS registered providers. An AHCCCS registered provider shall enter into a provider agreement with the Administration that meets the requirements of A.R.S. § 36-2904(E) and 42 CFR 431.107(b) as of April 6, 1992, which is incorporated by reference and on file with the Administration and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments.

B. Timely Submission of Claims.
1. Under A.R.S. § 36-2904(H)(3), the Administration regards a paper or electronic claim as submitted on the date that it is received by the Administration. The Administration shall do one or more of the following for each claim it receives:
   a. Place a date stamp on the face of the claim;
   b. Assign a system-generated claim reference number; or
   c. Assign a system-generated date-specific number.
2. Except as provided in subsection (B)(6), an AHCCCS registered provider shall initially submit a claim for covered services to the Administration not later than:
   a. Six months from the date of service, or
   b. Six months from the date of eligibility posting, whichever is later.
3. The Administration shall deny a claim if the claim is not initially submitted within:
   a. The six-month period from the date of service, or
   b. Six months from the date of eligibility posting, whichever is later.
4. Except as provided in subsection (B)(6), if an AHCCCS registered provider submits an initial claim within the six-month period noted in subsection (B)(2), the AHCCCS registered provider shall submit a clean claim to the Administration not later than:
   a. Twelve months from the date of service; or
   b. Twelve months from the date of eligibility posting, whichever is later.
5. A claim is clean when it meets the requirements under A.R.S. § 36-2904(H).
6. Under A.R.S. § 36-2904, an AHCCCS registered provider shall:
   a. Initially submit a claim for inpatient hospital services not later than six months from the date of member discharge for each claim, and
   b. Submit a clean claim for inpatient hospital services not later than 12 months from the date of discharge for each claim.
7. A contractor shall submit a reinsurance claim for payment as specified in contract.

C. Claims Processing
1. The Administration shall notify the AHCCCS registered provider with a remittance advice when a claim is processed for payment.

2. The Administration shall pay valid clean claims in a timely manner according to 42 CFR 447.45, February 15, 1990, which is incorporated by reference and on file with the Administration and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments.
   a. 90 percent of valid clean claims shall be paid within 30 days of the date of receipt of the claim;
   b. 99 percent of valid clean claims shall be paid within 90 days of the date of receipt of the claim; and
   c. The remaining one percent of valid clean claims shall be paid within 12 months of the date of receipt of a claim.
3. A claim is paid on the date indicated on the disbursement check.
4. A claim is denied as of the date of the remittance advice.
5. The Administration shall process a hospital claim according to R9-22-712.

D. Overpayments for AHCCCS Services.
1. An AHCCCS registered provider shall notify the Administration when the provider discovers an overpayment was made by the Administration.
2. The Administration shall recoup an overpayment from a future claim cycle if an AHCCCS registered provider fails to return the incorrect payment amount to the Administration.

E. Postpayment Claims Review.
1. The Administration shall conduct postpayment review of claims paid by the Administration if monies have been erroneously paid to an AHCCCS registered provider.
2. The Administration shall recoup an overpayment from a future claim cycle if an AHCCCS registered provider fails to return the incorrect payment amount to the Administration.
3. The Administration shall document any recoupment of an overpayment on a remittance advice.
4. An AHCCCS registered provider may file a grievance or request for hearing under Article 8 of this Chapter if the AHCCCS registered provider disagrees with the recoupment action.

F. Claims Review.
1. An AHCCCS registered provider shall:
   a. Obtain prior authorization from the Administration for non-emergency hospital admissions and covered services as specified in Articles 2 and 12 of this Chapter,
   b. Notify the Administration of hospital admissions under Article 2, and
   c. Make records available for review by the Administration.
2. The Administration shall reduce payment of or deny claims if an AHCCCS registered provider fails to obtain prior authorization or to notify the Administration under Article 2 and this Article.
3. The Administration may conduct prepayment medical review and post-payment review on all hospital claims, including outlier claims.
4. If the Administration issues prior authorization for a specific level of care but subsequent medical review indicates that a different level of care was medically appropriate, the claim shall be paid, or adjusted to pay, for the cost of the appropriate level of care.
5. Post-payment reviews shall comply with A.R.S. § 36-2903.01.

R9-22-704. Transfer of ~~payments~~ Payments

A. Business agent. For purposes of this Section, a business agent is a firm such as a billing service or accounting firm that renders statements and receives payment in the name of the contractor or AHCCCS registered provider.

~~A.~~B. ~~Payments permitted. Payments may be made to other than the contractor, noncontracting provider or non provider as follows~~ Allowable transfer of payments. The Administration or a program contractor may make payments to other than an AHCCCS registered provider, and the Administration may make payments to other than a program contractor after considering whether:
1. ~~When payment is made in accordance with~~ There is an assignment to a government agency or there is an assignment ~~made pursuant to~~ under a court order; or
2. ~~When payment is made to a business agent, such as a billing service or accounting firm, who renders statements and receives payment in the name of the contractor, noncontracting provider or nonprovider, providing that the agent's compensation for this service is:~~ A business agent's compensation is:
   a. ~~Reasonably related~~ Related to the cost of processing the statements; and
   b. Not dependent upon the actual collection of payment.

~~B.~~C. Payment to physicians, dentists, or other health professionals. ~~may be made~~ The Administration or a program contractor shall make payments to physicians, dentists, or other health professionals as follows:
1. To the employer of the physician, dentist, or other health professional, if ~~such person~~ the physician, dentist or other health professional is required, as a condition of employment, to ~~turn over~~ relinquish fees to ~~his or her~~ the employer;
2. To a foundation, plan, consortium or other similar organization, including a health care service organization, ~~which~~ that furnishes health care through an organized health care delivery system, if there is a contractual arrangement between the organization and the person furnishing the services under which the organization ~~bills or receives payment~~ submits a claim for ~~such~~ the services~~.~~; or

3. To the facility in which the service is provided, if there is a contractual relationship between the facility and the physician, dentist, or other health professional furnishing the services under which the facility submits the claim for the services.

~~C.~~D. ~~Payments prohibited.~~ Prohibition of transfer of payments for contractors or AHCCCS registered providers. ~~Contractors, noncontracting providers or nonproviders are prohibited from assigning~~ A contractor or an AHCCCS registered provider shall not assign all or part of AHCCCS payments for covered services furnished to a member to any party ~~other than the provider~~ except as specified in this Section.

~~D.~~E. Prohibition of transfer of payments to factors. ~~Payment~~ The Administration shall not make payment for covered services furnished to a member by a contractor~~, noncontracting provider or nonprovider~~ or an AHCCCS registered provider ~~shall not be made~~ to, or through a factor, either directly, or by virtue of a power of attorney given to the factor.

R9-22-707. Payments for Newborns

~~If a mother is enrolled on the date of her newborn baby's birth, a contractor shall be financially liable under the mother's capitation to provide all AHCCCS-covered services to the newborn baby from the date of birth to the date of the mother's disenrollment or the date of the baby's enrollment, whichever occurs 1st. However, if the mother is eligible for AHCCCS as an indigent or medically needy individual, the contractor shall have a maximum liability of 60 days under the mother's capitation.~~

If a mother is enrolled on the date of her newborn's birth, a contractor shall be financially liable under the mother's capitation to provide all AHCCCS-covered services to the newborn from the date of birth until the Administration is notified of the birth.

R9-22-711. Copayments

~~A.~~ ~~Contractors are responsible for collecting copayments from members. The following are excluded from copayment requirements:~~

~~1. Prenatal care including all obstetrical visits;~~
~~2. Well-baby and E.P.S.D.T. care;~~
~~3. Care in a nursing facilities and intermediate care facilities for the mentally retarded;~~
~~4. Visits scheduled by a primary care physician or practitioner, and not at the request of a member;~~
~~5. Drugs and medications beginning October 1, 1985; and~~
~~6. Family planning services as specified in 42 U.S.C. 1396o, July 16, 1998, incorporated by reference and on file with the Administration and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments.~~

~~B.~~ ~~Except as provided in subsection (A), contractors and members shall comply with the following copayment schedules:~~

~~1. Categorically eligible members:~~

~~*Covered Services*~~	~~*Copayment*~~
~~Doctor's office or home visit and all diagnostic and rehabilitative x-ray and laboratory services associated with the visit.~~	~~$1.00 per visit~~
~~Nonemergency surgery~~	~~$5.00 per procedure~~
~~Nonemergency use of the emergency room~~	~~$5.00 per visit~~

~~2. MI/MN, EAC, and ELIC members:~~

~~*Covered Services*~~	~~*Copayment*~~
~~Doctor's office or home visit and all diagnostic and laboratory services associated with the visit.~~	~~$5.00 per visit~~
~~Nonemergency surgery~~	~~$5.00 per procedure~~
~~Nonemergency use of the emergency room~~	~~$5.00 per visit~~

A. Except as provided in subsection (B), contractors and members shall comply with the following copayment schedule:

Covered Services	Copayment
Doctor's office or home visit and all diagnostic and rehabilitative x-ray and laboratory services associated with the visit.	$1.00 per visit
Nonemergency surgery.	$5.00 per procedure
Nonemergency use of the emergency room.	$5.00 per visit

B. AHCCCS registered providers shall collect copayments from members. The following are excluded from copayment requirements:

1. Prenatal care including all obstetrical visits;
2. Well-baby and E.P.S.D.T. care;
3. Care in a nursing facility or ICF/MR;
4. Visits scheduled by a primary care physician, attending physician, or practitioner, and not at the request of the member;
5. Drugs and medications beginning October 1, 1985; and
6. Family planning services.

C. A contractor or the Administration shall ensure that a member is not denied services because of the member's inability to pay a copayment.

R9-22-713. ~~Payments made on behalf of a contractor; recovery of indebtedness~~ Payments Made on Behalf of a Contractor; Recovery of Indebtedness

A. The Administration may make payments on behalf of a contractor in order to prevent a suspension or termination of AHCCCS services ~~when either:~~ after considering whether:

~~1. No payment period is specified by subcontract and a valid accrued claim is not paid within 60 days of receipt by such contractor, or~~

~~2. A valid accrued claim is not paid within the period set forth under subcontract.~~

1. A contractor does not adjudicate a valid accrued claim within the period set forth under subcontract, or
2. A contractor does not adjudicate 99 percent of valid accrued claims within 90 days of receipt from the AHCCCS registered provider.

~~**B.** In the event a payment is made by the Administration pursuant to this Article, the Administration shall reduce the capitation payment due a contractor by the amount of payment made, plus a 10% administrative fee for each claim that is paid.~~

~~**C.**~~**B.** If a contractor or a subcontracting provider receives an overpayment from the Administration or otherwise becomes indebted to the Administration, the contractor or subcontracting provider shall immediately ~~remit such funds~~ the amount of the indebtedness or overpayment to the Administration for deposit in the AHCCCS fund.

~~**D.** The action of the Administration to recover amounts from contractors or subcontracting providers may include the following:~~

~~1. Negotiation of a repayment agreement executed with the Administration.~~

~~2. Withholding or offsetting against current or future prepayments or other payments to be paid to the contractor or subcontracting provider.~~

~~3. Enforcement of, or collection against, the performance bond or withhold described in R9-22-701, subsection (C).~~

C. If the funds described in subsection (B) are not remitted, the Administration may recover the indebtedness or overpayment paid by the Administration to a contractor or subcontracting provider through:

1. Negotiation of a repayment agreement executed with the Administration;
2. Withholding or offsetting against current or future payments to be paid to the contractor or subcontracting provider; or
3. Enforcement of, or collection against, the performance bond, financial reserve, or other financial security under A.R.S. § 36-2903.

~~**E.**~~**D.** Except as specifically provided for in ~~these rules~~ this Article, the Administration ~~shall~~ is not ~~be~~ liable for payment for medical expenses incurred by enrolled members of prepaid capitated contractors.

R9-22-720. Reinsurance

A. For purposes of the Administration's reinsurance program, the insured entity is a prepaid plan with which the Administration contracts. The Administration shall specify in contract guidelines for claims submission, processing, and payment and the types of care and services that are provided to a member whose care is covered by reinsurance.

B. When the Administration determines that a contractor does not follow the specified guidelines for care or services and the care or services could be provided at a lower cost according to the guidelines, the contractor is entitled to reimbursement as if the care or services specified in the guidelines had been provided at a lower cost.

NOTICE OF FINAL RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 28. ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM (AHCCCS) ARIZONA LONG-TERM CARE SYSTEM

PREAMBLE

1. Sections Affected — **Rulemaking Action**

R9-28-101	Amend
R9-28-702	Amend
R9-28-703	Amend
R9-28-704	Amend
R9-28-709	Amend
R9-28-711	Amend
R9-28-712	Amend

2. The specific authority for the rulemaking, including both the authorizing statute (general and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 36-2945, 36-2932, and 36-2913

Implementing statutes: A.R.S. §§ 36-2932, 36-2944, 36-2937, and 36-2945

3. The effective date of the rules:

July 15, 2002

4. A list of all previous notices appearing in the Register addressing the final rule:

Notice of Rulemaking Docket Opening: 7 A.A.R. 5263, November 23, 2001

Notice of Proposed Rulemaking: 8 A.A.R. 1159, March 22, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Federal and State Policy Administrator

Address: 801 E. Jefferson
Mail Drop 4200
Phoenix, AZ 85034

Telephone: (602) 417-4198

Fax: (602) 256-6756

6. An explanation of the rule, including the agency's reasons for initiating the rule:

The Administration made changes to 9 A.A.C. 28 to conform to state statute, federal law, and to provide additional clarity and conciseness to existing rule language. These changes impact two Articles:

- Article 1, Definitions (R9-28-101) to add and amend definitions, and
- Article 7, Standards For Payments (R9-28-702 through R9-28-704; R9-28-709, R9-28-711 and R9-28-712) to add and amend language.

Following is an explanation of the changes:

9 A.A.C. 28, Article 1, Definitions

The Administration modified, added, or deleted definitions to improve the clarity and conciseness of the rule language.

9 A.A.C. 28, Article 7, Standards For Payments

R9-28-702. The Administration amended the language to improve the clarity and conciseness of the rule.

R9-28-703. The Administration amended the language to comply with statutory changes and to make the rule more clear and understandable.

R9-28-704. The Administration amended the language to improve the clarity and conciseness of the rule.

R9-28-709. The Administration amended the language to comply with state statute and to reference R9-22-720.

R9-28-711. The Administration made minor language changes.

R9-28-712. The Administration amended the language to improve the clarity and conciseness of the rule.

7. A reference to any study that the agency relied on in its evaluation of or justification for the rule and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

Not applicable

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

The contractors, members, providers, and AHCCCS are nominally impacted by the changes to the rule language. These rules define specific facets of Standards for Payment for the AHCCCS' long-term care program. The Administration is amending these rules to conform to state statute and federal law and make the rules more clear, concise, and understandable by:

- Grouping like concepts to provide clarity and conciseness to the rule language, and
- Clarifying language that does not clearly present policies or procedures.

As of May 2002, there are 33,989 members enrolled in Arizona's Long-term Care program, known as "ALTCS". The member may choose from eight program contractors.

R9-28-703 refers back to R9-22-703. R9-22-703 has been amended to reflect statute and federal law regarding six month and twelve month time-frames for submission and payment of claims. The Administration has used the six/twelve month time-frames since October 1999. The change benefits the providers as providers now receive their payments sooner.

The Administration has deleted all reference to an applicant residing in a county for 30 days in determining the county of fiscal responsibility in R9-28-712. The Administration found that the lack of clarity in this Section caused confusion in the implementation of the rule. The deletion of the 30-day references does not fiscally impact the Administration or its Program contractors and serves to clarify and simplify the "County of Fiscal Responsibility" process.

The amendments are primarily made to make the rules more clear, concise, and understandable. Nominal impact is anticipated. The small business community as a whole is not impacted by the clarifications. All affected entities benefit from the additional clarity and conciseness of the rule language. AHCCCS and contractors are directly affected by and benefit from the clarifications.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

1.	General	The Administration made the rules more clear, concise, and understandable by making grammatical, verb tense, punctuation, and structural changes throughout the rules.
2.	General	The Administration made other technical and grammatical changes based on suggestions from G.R.R.C. staff.
3.	R9-28-702(A)	The Administration amended the subsection to make the language more clear, concise, and understandable.
4.	R9-28-702(B)	The Administration amended the subsection to clarify the provisions for third-party payments. Added "to pay for noncovered services" for consistency.
5.	R9-22-704	The Administration amended the subsection for clarity and consistency.

11. A summary of the principal comments and the agency response to them:

#	Subsection	Comment	Response or Change
1.	R9-28-702(A)	Although the following comments were made regarding rules in Article 22, they are addressed here because the comments are also applicable to Article 28. We do not understand the reference to "section B, under A.R.S. § 36-2903.01". We believe you might have meant, "section B of this section, and under A.R.S. § 36-2903.01". Section A essentially reenacts old language requiring a provider "receive verification" from the Administration that the person was ineligible "or that the services provided were not covered by AHCCCS" before billing the patient. This regulatory requirement as it pertains to verification that services are not covered has always been at odds with reality and should be corrected now that the regulations are being revised. There is no process of which we are aware for a provider to obtain timely "verification" that services are not covered. Unless the Administration intends to establish a cost-effective, rapid response system for such verification, the requirement should be deleted. Providers are also unable to comply with the rule when trying to determine eligibility for behavioral health services. AHCCCS refuses to verify behavioral health enrollment. Therefore a provider cannot receive verification through AHCCCS that a member is ineligible or that the services are not covered. Behavioral health enrollment should be made part of the eligibility verification system, or this Section modified in recognition that a provider may need to bill a patient to have the patient disclose eligibility. **(Gammage & Burnham)**	**Agree** Gammage & Burnham are correct. The Administration meant subsection (B). **Clarify language** For clarity, the Administration has amended the language. In accordance with A.R.S. § 36-2903.01(L), R9-28-702(A) directs the providers to verify AHCCCS eligibility-not whether or not a member qualifies for specific services, e.g. behavioral health coverage. Neither the statute nor the rule requires that the provider verify coverage for services as a prerequisite to billing members. Once eligibility for AHCCCS benefits is verified, providers may verify coverage for behavioral health services through ADHS.

2.	R9-28-702(B)	We suggest that AHCCCS clarify the provisions relating to third-party payments by revising the first sentence of R9-22-702(B)(3) to read as follows: "To recover from a member, or a person acting on behalf of a member, that portion of a payment made by a third party when the payment duplicates AHCCCS paid benefits and has not been assigned to a contractor under R9-22-1002(B)." **(Gammage & Burnham)** In the second sentence the word "contractor" should be changed to "an AHCCCS registered provider" to be consistent with the introductory phrase of the Section. Paragraph 4 permits billing members "for expenses incurred during the period of time when the member intentionally withheld information…" The phrase "or a person acting on behalf of a member" should be inserted here as well. **(AzHHA through its attorneys)**	**Agree** **3.**To recover from a member that portion of payment made by a third party to the member when the payment duplicates AHCCCS paid benefits and has not been assigned to a contractor under R9-22-1002(B)." An AHCCCS registered provider who makes a claim under this provision shall not charge more than the actual, reasonable cost of providing the covered service **Disagree** **4.**The Administration believes that a member representative should neither be held responsible for the member's bills nor should the member be held responsible for a potential error made by the member representative. The phrase "or a person acting on behalf of a member" has been deleted from R9-28-702(B) to maintain consistency.
3.	R9-28-702(B)(2)	Should this not state, "To pay for non-covered services" like it does under R9-22-702(B)? **(AzHHA through its attorneys)**	**Agree** The Administration has amended the language.
4.	R9-28-704	AHCCCSA need to make the same changes her that AzHHA suggest for R9-22-704. and that the rule correctly reference "program contractor" instead of "contractor." **(AzHHA through its attorneys)**	**Agree** The Administration has amended the language.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rules:

Not applicable

14. Was this rule previously adopted as an emergency rule?

No

15. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

CHAPTER 28. ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM (AHCCCS)
ARIZONA LONG-TERM CARE SYSTEM

ARTICLE 1. DEFINITIONS

Section
R9-28-101. General Definitions

ARTICLE 7. STANDARDS FOR PAYMENTS

Section
R9-28-702. Prohibition Against Charges to Members ~~or Eligible Persons~~
R9-28-703. Claims
R9-28-704. Transfer of Payments

ARTICLE 1. DEFINITIONS

R9-28-101. General Definitions

A. Location of definitions. Definitions applicable to Chapter 28 are found in the following:

Definition	Section or Citation
"Administration"	A.R.S. § 36-2931
"ADHS"	R9-22-112
"Aggregate"	R9-22-107
"AHCCCS"	R9-22-101
"AHCCCS Registered Provider"	R9-22-101
"Algorithm"	R9-28-104
"ALTCS"	R9-28-101
"ALTCS acute care services"	R9-28-104
"Alternative HCBS setting"	R9-28-101
"Ambulance"	R9-22-102
"Applicant"	R9-22-101
"Bed hold"	R9-28-102
"Behavior intervention"	R9-28-102
"Behavior management services"	R9-20-101
"Behavioral health evaluation"	R9-22-112
"Behavioral health medical practitioner"	R9-22-112
"Behavioral health professional"	R9-20-101
"Behavioral health service"	R9-20-101
"Behavioral health technician"	R9-20-101
"Billed charges"	R9-22-107
"Board-eligible for psychiatry"	R9-22-112
"Capped fee-for-service"	R9-22-101
"Case management plan"	R9-28-101
"Case manager"	R9-28-101
"Case record"	R9-22-101
"Categorically-eligible"	R9-22-101
"Certification"	R9-28-105
"Certified psychiatric nurse practitioner"	R9-22-112
"CFR"	R9-28-101
"Clean claim"	R9-20-101
"Clinical supervision"	R9-22-112
"CMS"	R9-22-101
"Community Spouse"	R9-28-104
"Contract"	R9-22-101
"Contract year"	R9-28-101
"Contractor"	A.R.S. § 36-2901
"County of fiscal responsibility"	R9-28-107
"Covered services"	R9-28-101
"CPT"	R9-22-107
"CSRD"	R9-28-104
"Day"	R9-22-101
"Department"	A.R.S. § 36-2901
"De novo hearing"	42 CFR 431.201
"Developmental disability"	A.R.S. § 36-551
"Diagnostic services"	R9-22-102
"Director"	R9-22-101
"Disenrollment"	R9-22-117
"DME"	R9-22-102
"EPD"	R9-28-301
"Eligible person"	A.R.S. § 36-2931
"Emergency medical services"	R9-22-102

"Encounter"	R9-22-107
"Enrollment"	R9-22-117
"Estate"	A.R.S. § 14-1201
"Facility"	R9-22-101
"Factor"	R9-22-101
"Fair consideration"	R9-28-104
"FBR"	R9-22-101
"Grievance"	R9-22-108
"GSA"	R9-22-101
"Guardian"	R9-22-116
"HCBS" or "Home and community based services"	A.R.S. §§ 36-2931 and 36-2939
"Health care practitioner"	R9-22-112
"Hearing"	R9-22-108
"Home"	R9-28-101
"Home health services"	R9-22-102
"Hospital"	R9-22-101
"ICF-MR" or "Intermediate care facility for the mentally retarded"	42 CFR 483 Subpart I
"IHS"	R9-28-101
"IMD"	42 CFR 435.1009 and R9-28-111
"Indian"	42 CFR 36.1
"Institutionalized"	R9-28-104
"Interested Party"	R9-28-106
"JCAHO"	R9-28-101
"License" or "licensure"	R9-22-101
"Medical record"	R9-22-101
"Medical services"	R9-22-101
"Medical supplies"	R9-22-102
"Medically eligible"	R9-28-104
"Medically necessary"	R9-22-101
"Member"	A.R.S. § 36-2931
"Mental disorder"	A.R.S. § 36-501
"MMMNA"	R9-28-104
"Nursing facility" or "NF"	42 U.S.C. 1396r(a)
"Noncontracting provider"	A.R.S. § 36-2931
"Occupational therapy"	R9-22-102
"Partial care"	R9-22-112
"PAS"	R9-28-103
"PASARR"	R9-28-103
"Pharmaceutical service"	R9-22-102
"Physical therapy"	R9-22-102
"Physician"	R9-22-102
"Post-stabilization services"	42 CFR 438.114
"Practitioner"	R9-22-102
"Primary care provider (PCP)"	R9-22-102
"Primary care provider services"	R9-22-102
"Prior authorization"	R9-22-102
"Prior period coverage" or "PPC"	R9-22-107
"Private duty nursing services"	R9-22-102
"Program contractor"	A.R.S. § 36-2931
"Provider"	A.R.S. § 36-2931
"Psychiatrist"	R9-22-112
"Psychologist"	R9-22-112
"Psychosocial rehabilitation"	R9-20-101
"Quality management"	R9-22-105
"Regional behavioral health authority" or "RBHA"	A.R.S. § 36-3401
"Radiology"	R9-22-102
"Reassessment"	R9-28-103
"Redetermination"	R9-28-104

"Referral"	R9-22-101
"Reinsurance"	R9-22-107
"Representative"	R9-28-104
"Respiratory therapy"	R9-22-102
"Respite care"	R9-28-102
"RFP"	R9-22-106
"Room and board"	R9-28-102
"Scope of services"	R9-22-102
"Section 1115 Waiver"	A.R.S. § 36-2901
"Speech therapy"	R9-22-102
"Spouse"	R9-28-104
"SSA"	42 CFR 1000.10
"SSI"	R9-22-101
"Subcontract"	R9-22-101
"Utilization management"	R9-22-105
"Ventilator dependent"	R9-28-102

B. General definitions. In addition to definitions contained in A.R.S. §§ 36-551, 36-2901, 36-2931, and 9 A.A.C. 22, Article 1, the following words and phrases have the following meanings unless the context of the Chapter explicitly requires another meaning:

"ALTCS" means the Arizona Long-term Care System as authorized by A.R.S. § 36-2932.

"Alternative HCBS setting" means a living arrangement approved by the Director and licensed or certified by a regulatory agency of the state, where a member may reside and receive HCBS including:

For a person with a developmental disability specified in A.R.S. § 36-551:
Community residential setting defined in A.R.S. § 36-551;
Group home defined in A.R.S. § 36-551;
State-operated group home under A.R.S. § 36-591;
Family foster home under 6 A.A.C. 5, Article 58;
Group foster home under R6-5-5903;
Licensed residential facility for a person with traumatic brain injury under A.R.S. § 36-2939;
Adult therapeutic foster home under 9 A.A.C 20, Articles 1 and 15;
Level ~~I~~ 2 and Level ~~II~~ 3 behavioral health agencies under 9 A.A.C. 20, Articles 1, 4, 5, and 6; and
Rural substance abuse transitional agencies under 9 A.A.C. 20, Articles 1 and 14~~.~~ ; and

For a person who is elderly or physically disabled under R9-28-301, and the facility, setting, or institution is registered with AHCCCS:
Adult foster care homes defined in A.R.S. § 36-401 and as authorized in A.R.S. § 36-2939;
Assisted living home or assisted living center, units only, under A.R.S. § 36-401, and as authorized in A.R.S. § 36-2939;
Licensed residential facility for a person with a traumatic brain injury specified in A.R.S. § 36-2939;
Adult therapeutic foster home under 9 A.A.C. 20, Articles 1 and 15;
Level ~~I~~ II and Level ~~II~~ III behavioral health agencies under 9 A.A.C. 20, Articles 1, 4, 5, and 6;
Rural Substance Abuse Transitional Agencies under 9 A.A.C. 20, Articles 1 and 14; and
Alzheimer's treatment assistive living facility demonstration pilot project as specified in Laws 1999, Ch. 313, § 35 as amended by Laws 2001, Ch. 140, § 1.

"Case management plan" means a service plan developed by a case manager that involves the overall management of a member's care, and the continued monitoring and reassessment of the member's need for services.

"Case manager" means a person who is either a degreed social worker, a licensed registered nurse, or a person with a minimum of two years of experience in providing case management services to a person who is elderly and physically disabled or has developmental disabilities.

"Contract year" means the period beginning on October 1 and continuing until September 30 of the following year.

"CFR" means Code of Federal Regulations, unless otherwise specified in this Chapter.

"Covered Services" means the health and medical services described in Articles 2 and 11 of this Chapter as being eligible for reimbursement by AHCCCS.

"Home" means a residential dwelling that is owned, rented, leased, or occupied by a member, at no cost to ~~a~~ the member, including a house, a mobile home, an apartment, or other similar shelter. A home is not a facility, a setting, or an institution, or a portion of any of these~~,~~ that is licensed or certified by a regulatory agency of the state as a:

Health care institution under A.R.S. § 36-401;
Residential care institution under A.R.S. § 36-401;
Community residential setting under A.R.S. § 36-551; or
Behavioral health service under 9 A.A.C. 20, Articles 1, 4, 5, and 6.

"IHS" means the Indian Health Service.

"JCAHO" means the Joint Commission on Accreditation of Healthcare Organizations.

ARTICLE 7. STANDARDS FOR PAYMENTS

R9-28-702. Prohibition Against Charges to Members ~~or Eligible Persons~~

~~**A.** A program contractor, provider, or noncontracting provider shall not charge, submit a claim, demand, or otherwise collect payment from a member or eligible person or a person acting on behalf of a member or eligible person for any covered service other than for a member's or eligible person's share of cost, authorized copayment, or payment for noncovered services. A program contractor shall have the right to recover from a member that portion of payment made by a 1st or 3rd party to the member when the payment duplicates ALTCS paid benefits.~~

~~**B.** A program contractor, provider, or noncontracting provider shall not bill or make any attempt to collect payment, directly or through a collection agency, from an individual claiming to be ALTCS eligible without 1st receiving verification from the Administration that the individual was ineligible for ALTCS on the date of service, or that service provided was not covered by ALTCS, except as specified in subsection (A).~~

~~**C.** A program contractor, provider, or noncontracting provider may bill an eligible person or member for medical expenses incurred during a period of time when the individual willfully withheld material information pertaining to the individual's ALTCS eligibility or enrollment.~~

A. Except as provided in subsection (B), an AHCCCS registered provider shall not do either of the following, unless services are not covered or without first receiving verification from the Administration that the person was ineligible for AHCCCS on the date of service:

1. Charge, submit a claim to, demand or collect payment from a person claiming to be AHCCCS eligible; or
2. Refer or report a person claiming to be AHCCCS eligible to a collection agency or credit reporting agency.

B. An AHCCCS registered provider may charge, submit a claim to, demand or collect payment from a member as follows:

1. To collect an authorized copayment;
2. To pay for non-covered services;
3. To recover from a member that portion of a payment made by a third-party to the member if the payment duplicates AHCCCS paid benefits and is not assigned to a contractor under R9-22-1002(B). An AHCCCS registered provider that makes a claim under this Article shall not charge more than the actual, reasonable cost of providing the covered service; or
4. To bill a member for medical expenses incurred during a period when the member intentionally withheld information or intentionally provided inaccurate information pertaining to the member's AHCCCS eligibility or enrollment that caused the payment to the provider to be reduced or denied.

R9-28-703. Claims

~~**A.** Program contractors. All claims for covered services rendered to a member enrolled with a prepaid program contractor, shall be submitted to the program contractor.~~

~~**B.** Providers and noncontracting providers. A provider or noncontracting provider, shall submit all claims for covered services rendered to an eligible person to the Administration for payment in accordance with A.A.C. R9-22-703 and this Article.~~

~~**C.** Timeliness. A program contractor, provider, or noncontracting provider shall ensure that a claim for covered services provided to a member or eligible person is initially received by the Administration no later than 9 months after the last date of service shown on the claim, or 9 months after the date of eligibility posting, whichever is later. The Administration shall not consider a claim for payment unless the claim is received by the Administration as a clean claim no later than 12 months after the last date of service shown originally on the claim, or 12 months after the date of eligibility posting, whichever is later.~~

~~1. Reinsurance claims shall be submitted to the Administration in accordance with A.A.C. R9-22-703.~~
~~2. The date of receipt of a claim is the date the Administration receives the claim. The Administration shall consider for payment only claims received in accordance with the provisions of this Section.~~

An AHCCCS registered provider shall submit all claims for covered services rendered to:

1. A member enrolled with a program contractor, to the program contractor under R9-22-705 and this Article; or
2. A FFS member, to the Administration for payment under R9-22-703 and this Article.

R9-28-704. Transfer of Payments

~~**A.** Payments permitted. In the following circumstances and when in the best interests of the state, the Administration or its contractors shall make payments to other than a program contractor, provider, or noncontracting provider~~

~~1. When payment is in accordance with an assignment to a government agency or an assignment made under a court order; or~~
~~2. When payment is to a business agent, such as a billing service or accounting firm, that renders statements and receives payment in the name of the program contractor, noncontracting provider, or provider, providing that the agent's compensation for this service is:~~
~~a. Reasonably related to the cost of processing the statements; and~~
~~b. Not dependent upon the actual collection of payment.~~

~~**B.** When in the best interests of the state, the Administration or its contractors shall make payment to a primary care provider, dentist, or other health care professional as follows:~~
~~1. To the employer of the primary care provider, dentist, or other health professional, if the health care professional is required, as a condition of employment, to turn over fees to the employer;~~
~~2. To a foundation, plan, consortium, or other similar organization, including a health care service organization, that furnishes health care through an organized health care delivery system, if there is a contractual arrangement between the organization and the health care professional furnishing the services under which the organization bills or receives payment for the services.~~

~~**C.** Payments prohibited. A program contractor, provider, or noncontracting provider shall not assign all or part of ALTCS payments for covered services furnished to a member or eligible person to any party other than the program contractor, provider, or noncontracting provider except as specified in this Section.~~

~~**D.** Prohibition of payments to factors. A program contractor, provider, or noncontracting provider shall not make payment for covered services furnished to a member or eligible person to or through a factor, either directly, or by virtue of a power of attorney given to the factor.~~

A. Business agent. For purposes of this Section, a business agent is a firm such as a billing service or accounting firm that renders statements and receives payment in the name of the program contractor or AHCCCS registered provider.

B. Allowable transfer of payments. The Administration or a program contractor may make payments to other than an AHCCCS registered provider, and the Administration may make payments to other than a program contractor after considering whether:
1. There is an assignment to a government agency or there is an assignment under a court order; or
2. A business agent's compensation for this service is:
a. Related to the cost of processing the statements; and
b. Not dependent upon the actual collection of payment.

C. Payment to physicians, dentists, or other health professionals. The Administration or a program contractor shall make payments to a physician, dentist or other health professional as follows:
1. To the employer of the physician, dentist or other health professional, if the physician, dentist, or other health professional is required, as a condition of employment, to relinquish fees to the employer;
2. To a foundation, plan, consortium, or other similar organization, including a health care service organization, that furnishes health care through an organized health care delivery system, if there is a contractual arrangement between the organization and the person furnishing the services under which the organization submits a claim for the services; or
3. To the facility in which the service is provided, if there is a contractual relationship between the facility and the physician, dentist, or other health professional furnishing the services under which the facility submits the claim for the services.

D. Prohibition of transfer of payments for program contractors or AHCCCS registered providers. A program contractor or an AHCCCS registered provider shall not assign all or part of AHCCCS payments for covered services furnished to a member to any party except as specified in this Section.

E. Prohibition of transfer of payments to factors. The Administration shall not make payment for covered services furnished to a member by a contractor, or an AHCCCS registered provider to, or through a factor, either directly, or by virtue of a power of attorney given to the factor.

R9-28-709. Reinsurance

~~**A.** Program contractor acquired reinsurance. A program contractor may obtain reinsurance for coverage of services provided to members enrolled with the program contractor.~~

~~**B.** Administration reinsurance. For purposes of the Administration's reinsurance program, the insured entity shall be a program contractor.~~
~~1. Reimbursement of covered services shall be subject to a deductible as specified in contract. The deductible shall be reset at the beginning of each contract year and when a member changes program contractors. Allowable costs in excess of the deductible amount shall have a reinsurance percentage as specified in contract applied to calculate the reimbursement amount. Medicare and other 1st -and 3rd -party payments shall be deducted from allowable costs before calculating the reimbursement amount.~~
~~2. Acute inpatient and psychiatric facility services provided while a member is enrolled with a program contractor are covered services for purposes of reinsurance reimbursement.~~

~~3. Services reimbursed under the reinsurance benefit are subject to medical review by the Administration. Reimbursement may be denied, payment levels reduced, or financial sanctions imposed upon a program contractor when medical review results in identification of services that could have been provided in a less costly, medically appropriate manner. Medical review and resulting adjustments to reimbursement shall be in accordance with contract.~~
~~4. Inpatient encounter data submitted by a program contractor shall be used by the Administration to identify reinsurance cases that exceed the deductible amounts and are subject to reimbursement.~~
~~5. A program contractor shall make available to the Administration upon request documentation to support:~~
~~a. The services provided;~~
~~b. The reimbursement for those services; and~~
~~c. Attempts to recover the cost of those services from other payors.~~
~~6. The Administration may require contractual terms that prescribe special reinsurance requirements for catastrophic cases. The requirements may include:~~
~~a. Conditions under which a case is considered catastrophic;~~
~~b. Claim and documentation requirements; and~~
~~c. The method and amount of reimbursement for catastrophic cases.~~

A program contractor shall submit to the Administration all reinsurance claims for services rendered to a member enrolled with the program contractor as specified in R9-22-720.

R9-28-711. Payments Made on Behalf of a Program Contractor; Recovery of Funds; Postpayment Reviews

A. The Administration may make payments on behalf of a program contractor and may recover funds from a program contractor or AHCCCS registered provider ~~in accordance with standards in~~ according to standards under A.A.C. R9-22-713. For purposes of this Section, the term "contractor" as it appears in A.A.C. R9-22-713 means "program contractor".

B. The Administration shall conduct postpayment reviews of claims paid by the Administration and shall recoup any monies erroneously paid according to standards under A.A.C. R9-22-703. Program contractors may conduct postpayment reviews of claims paid by program contractors and may recoup any monies erroneously paid.

R9-28-712. County of Fiscal Responsibility

A. General requirements.
1. ~~The Administration shall determine the county of fiscal responsibility to determine which program contractor is responsible for an elderly or physically disabled applicant (applicant) or an elderly or physically disabled member (member).~~ The Administration shall determine the county of fiscal responsibility under A.R.S. § 36-2913 for an applicant or member who is elderly or physically disabled.
2. A program contractor shall cover services and provisions specified in 9 A.A.C. 22, Articles 2 and 7 and Article 11 of this Chapter.

~~**B.** Criteria for determining county of fiscal responsibility for an applicant.~~
~~1. The county of fiscal responsibility is the county where the applicant resides if:~~
~~a. The applicant resides in the applicant's own home as specified in R9-28-101(B)(16),~~
~~b. The applicant moved from another state within the last 30 days, or~~
~~c. The applicant has continuously resided in the current county 30 days immediately before entering:~~
~~i. An alternative HCBS setting as specified in R9-28-101(B)(3),~~
~~ii. A NF as specified in A.A.C. R9-22-101(B)(27), or~~
~~iii. An intermediate care facility for the mentally retarded as specified in R9-28-101(B)(18).~~
~~2. The county of fiscal responsibility is the county where the applicant resides, whether in an alternative HCBS setting, or a NF, or an intermediate care facility for the mentally retarded, 30 days immediately before moving to another county.~~

B. Criteria for determining county of fiscal responsibility for an applicant.
1. If the applicant resides in the applicant's own home, the county of fiscal responsibility is the county where the applicant currently resides.
2. This applies only if subsection (B)(3) does not apply. If the applicant is residing in a NF or alternative HCBS setting, the county of fiscal responsibility is the county in which the applicant last resided in the applicant's own home.
3. If the applicant moves from another state directly into a NF or alternative HCBS setting in this state, the county of fiscal responsibility is the county in which the person currently resides.
4. If the applicant moves from the Arizona State Hospital (ASH) into a NF or alternative HCBS setting, or is an inmate of a public institution moving from the public institution into a NF or alternative HCBS setting, the county of fiscal responsibility is the county in which the applicant resided in the applicant's own home prior to admission to ASH or the public institution.

C. Criteria for determining if there is a change in county of fiscal responsibility for a member moving from one county to another county.
1. No change in the county of fiscal responsibility. ~~The county of fiscal responsibility for a member shall remain the same if:~~ There is no change in the county of fiscal responsibility for a member if:

~~1.~~a. The member moves from a NF to another NF in a different county,
~~2.~~b. The member moves from a NF to an alternative HCBS setting in a different county,
~~3.~~c. The member moves from an alternative HCBS setting to another alternative HCBS setting in a different county,
~~4.~~d. The member moves from an alternative HCBS setting to a NF in a different county,
~~5.~~e. The member moves from the member's own home to an alternative HCBS setting in a different county, ~~or~~
~~6.~~f. The member moves from the member's own home to a NF in a different county~~.~~.
g. The member moves from a NF or alternative HCBS setting into ASH, or
h. The member moves from ASH to a NF or alternative HCBS setting.

~~D.~~2. Change in the county of fiscal responsibility. If ~~the~~ a member moves from ~~1~~ one county to another, the county of fiscal of responsibility ~~shall change~~ changes to the new county if the member moves from:
~~1.~~a. An alternative HCBS setting to the member's own home in a different county,
~~2.~~b. A NF to the member's own home in a different county,
~~3. An intermediate care facility for the mentally retarded to the member's own home in a different county, or~~
~~4.~~c. The member's own home to the member's own home in a different county~~.~~ , or
d. ASH to the member's own home.

~~E.~~3. Transfers between program contractors. The county of fiscal responsibility changes if ~~The~~ the Administration ~~may transfer~~ transfers a member from ~~1~~ one program contractor to a different program contractor and if:
~~1.~~a. Both program contractors agree, or
~~2.~~b. The Administration determines that it is in the best interest of the member.

~~F. No program contractor. If there is no authorized program contractor within the member's service area, the member shall receive services according to A.R.S. § 36-2945.~~

~~G. Arizona State Hospital (ASH). If the member moves from ASH to an approved ALTCS setting, the Administration shall assign the member to a program contractor in the county that the member resided in prior to admission in ASH. This subsection does not apply when a member moves from ASH to a member's own home.~~

NOTICE OF FINAL RULEMAKING

TITLE 9. HEALTH SERVICES

CHAPTER 31. ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM CHILDREN'S HEALTH INSURANCE PROGRAM

PREAMBLE

1. Sections Affected — **Rulemaking Action**

R9-31-101	Amend
R9-31-107	Amend
R9-31-116	Amend
R9-31-503	Repeal
R9-31-702	Amend
R9-31-703	Amend
R9-31-704	Amend
R9-31-711	Amend
R9-31-713	Amend
R9-31-719	New Section
R9-31-1618	Amend
R9-31-1620	Amend
R9-31-1621	Amend
R9-31-1623	Repeal

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 36-2982 and 36-2986

Implementing statutes: A.R.S. §§ 36-2982, 36-2986 and 36-2987

3. The effective date of the rules:

July 15, 2002

4. A list of all previous notices appearing in the Register addressing the final rule:

Notice of Rulemaking Docket Opening: 7 A.A.R. 5263, November 23, 2001

Notice of Proposed Rulemaking: 8 A.A.R. 1168, March 22, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Federal and State Policy Administrator

Address: 801 E. Jefferson
Mail Drop 4200
Phoenix, AZ 85034

Telephone: (602) 417-4198

Fax: (602) 256-6756

6. An explanation of the rule, including the agency's reasons for initiating the rule:

The Administration made changes to 9 A.A.C. 31 to conform to state statute, federal law, and to provide additional clarity and conciseness to existing rule language. These changes impact four Articles:

- Article 1, Definitions (R9-31-101, R9-31-107 and R9-31-116) to add and amend definitions,
- Article 5, General Provision And Standards (R9-22-503, Reinsurance) to repeal a Section,
- Article 7, Standards For Payments (R9-31-702 through R9-31-704; R9-31-711, R9-31-713 and R9-31-719) to add and amend language, and
- Article 16, Services For Native Americans (R9-31-1618, R9-31-1620, R9-31-1621, and R9-31-1623) to add, amend, and repeal language.

9 A.A.C. 31, Article 1, Definitions

The Administration modified, added, or deleted definitions to improve the clarity and conciseness of the rule language.

9 A.A.C. 31, Article 5, General Provision And Standards

R9-31-503. The Administration repealed this Section and relocated "Reinsurance" to R9-31-719.

9 A.A.C. 31, Article 7, Standards For Payments

R9-31-702. The Administration amended the language to improve the clarity and conciseness of the rule.

R9-31-703. The Administration made minor changes to improve clarity.

R9-31-704. The Administration made minor changes to improve clarity.

R9-31-711. The Administration made minor changes to improve clarity.

R9-31-713. The Administration amended the language to conform to federal law (Section A); make the language more clear and understandable and deleted Section B as it is covered in Section C and in contract.

R9-31-719. The Administration drafted new language for former R9-31-503, "Reinsurance". The new language conforms to statutory requirements.

9 A.A.C. 31, Article 16, Services For Native Americans

R9-31-1618. The Administration amended the language to comply with statutory changes and added language to make the rule more clear and understandable.

R9-31-1620. The Administration amended the language to improve the clarity and conciseness of the rule.

R9-31-1621. The Administration amended the language to improve the clarity and conciseness of the rule.

R9-31-1623. The Administration repealed this Section to conform to federal law that prohibits copayments and premiums for Native Americans.

7. A reference to any study that the agency relied on in its evaluation of or justification for the rule and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

Not applicable

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

As of May 2002, there are 48,212 members enrolled in Arizona's State Children's Health Insurance Program (SCHIP), known as "KidsCare". There are ten contracted health plans from which the member may choose. Native American members may opt for a contracted health plan or the IHS system.

R9-31-503 was repealed and R9-31-719 was established to address reinsurance. Financial terms for the contractor are now addressed in contract rather than rule. Computations and percentages have been incorporated in contract.

R9-31-1618 was amended to reflect statute and federal law regarding six month and twelve month time-frames for submission and payment of claims. The Administration has used the six/twelve month time-frames since October 1999. The change benefits the providers as the providers now receive their payments sooner.

R9-31-1623 was repealed to conform to federal law that prohibits copayments and premiums for Native Americans. Premiums were not collected for this population, as the population did not meet the financial threshold for paying a premium.

The amendments are primarily made to make the rules more clear, concise, and understandable. Nominal impact is anticipated. The small business community as a whole is not impacted by the clarifications. All affected entities benefit from the additional clarity and conciseness of the rule language. AHCCCS and contractors are directly affected by and benefit from the clarifications.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

1.	General	The Administration made the rules more clear, concise, and understandable by making grammatical, verb tense, punctuation, and structural changes throughout the rules.
2.	General	The Administration made other technical and grammatical changes based on suggestions from G.R.R.C. staff.
3.	General	The Administration removed all reference to Tribal Regional Behavioral Health Authority (TRBHAs) from the rules upon request of the AZ Department of Health Services (ADHS), as AHCCCS serves only as a third-party administrator. AHCCCS notes the following information to clarify the comment: • The Administration has an intergovernmental agreement with ADHS to provide behavioral health services. ADHS has intergovernmental agreements with TRBHAs to provide behavioral health services on reservation. • ADHS has entered into an arrangement with the Administration to pay the claims that ADHS receives from the TRHBAs. This makes the Administration the third party administrator for payment of claims.
4.	R9-31-702(A)	The Administration amended this subsection to make the language more clear, concise, and understandable based on comments received from Gammage & Burnham.
5.	R9-31-702(B)	The Administration amended this subsection to clarify the provisions regarding third-party payments.
6.	R9-31-704(A)	The Administration amended the language to align with federal regulations.
7.	R9-22-713(A)(2)	The Administration amended the subsection to make the language more clear, concise, and understandable.
8.	R9-22-1618(D)(2)	The Administration added language to this subsection to clarify that a recoupment of an overpayment shall be documented on a remittance advice.

11. A summary of the principal comments and the agency response to them:

#	Subsection	Comment	Response or Change
1	R9-31-702	We ask that AHCCCS make the same changes here that we suggest for R9-22-702. **(AzHHA through its attorneys)**	**Agree** Changes agreed to and made for R9-22-702 have been made for R9-31-702.
2	R9-31-704	The rules for the acute care and ALTCS programs regulate transfer of payments because of the prohibition against reassignment of provider claims under 42 U.S.C. 1396a(a)(32) and 42 CFR 447.10. We have not found similar provisions for a Title XXI program like KidsCare, nor have we found an incorporation of the Title XIX provisions by reference. Please provide the federal statutory or regulatory basis for R9-31-704, or consider deleting it. **(AzHHA through its attorneys)**	**Clarification** The Administration has full operational authority under A.R.S. § 36-2986 to adopt rules for the implementation of the SCHIP program. The Administration believes it is necessary to prohibit transfer of payments to provide safeguards for and reduce the possibility of inappropriate payments.

3	R9-31-711(A)	Only references a $5.00 copay when in R9-22-711 there is a $1.00 option. **(AZ Department of Health Services) (ADHS)**	**Clarification** The copayments in Chapter 22 for the Title XIX population do not apply to the Title XXI (SCHIP) program. Both programs have their own state plans (contracts) with the federal government. The copayment and premium structure is different under the Title XXI state plan. Therefore there is no copay other than the $5.00 copay at this time.
4	R9-31-713(A)(2)	Subsection should read, "when a contractor does not adjudicate 99% of valid accrued claims within 90 days of receipt from the AHCCCS registered provider, whichever time-frame is longer." **(AZ Department of Health Services)**	**Agree** The Administration has amended the language.
5	R9-31-1618 general	All references to the Tribal Regional Behavioral Health Authority (TRBHAS) should be removed. AHCCCS is only acting as ADHS' TPA (Third party administrator) which could change anytime. AHCCCS notes the following information to clarify the comment: • The Administration has an intergovernmental agreement with ADHS to provide behavioral health services. ADHS has intergovernmental agreements with TRBHAs to provide behavioral health services on reservation. • ADHS has entered into an arrangement with the Administration to pay the claims that ADHS receives from the TRBHAs. This makes the Administration the third party administrator for payment of claims. The Administration does not have a direct relationship with the TRBHAs. • ADHS prior authorizes the TRBHA services. Grievances and appeals are submitted directly to ADHS. ADHS has the right to pay a claim outside the six-month window since it is an at-risk provider. **(AZ Department of Health Services)**	**Agree** The term, TRBHA, has been removed from these opened sections and sub sections. **Disagree** ADHS does not have the right to pay outside the six-month window. Under A.R.S. § 36-2904(H), ADHS must adhere to the same claims guidelines as other AHCCCS contractors.
6	R9-31-1618(C)(3)	Need to add that incorrect payments should be returned to ADHS for the TRBHAs. **(AZ Department of Health Services)**	**Clarification** ADHS has asked for all references to TRBHAs in subsection 1618 to be removed. This issue becomes moot.
7	R9-31-1618(D)(2)	Need to add that grievances should be filed with ADHS not AHCCCS for TRBHAs. **(AZ Department of Health Services)**	**Clarification** ADHS has asked for all references to TRBHAs in subsection 1618 to be removed. This issue becomes moot.
8	R9-31-1618(E)(1)(a)	Prior authorizations are done by ADHS. **(AZ Department of Health Services)**	**Clarification** ADHS has asked for all references to TRBHAs in subsection 1618 to be removed. This issue becomes moot.
9	R9-31-1618(E)(2)	Prior authorizations are done by ADHS, not the AHCCCS Administration. **(AZ Department of Health Services)**	**Clarification** ADHS has asked for all references to TRBHAs in subsection 1618 to be removed. This issue becomes moot.

10	R9-31-1618(E)(3)	Behavioral health claims should not pend for medical review or postpayment review per federal requirement on confidentiality. **(AZ Department of Health Services)**	**Clarification** ADHS has asked for all references to TRBHAs in subsection 1618 to be removed. This issue becomes moot.
11	R9-31-1620(A) and (B)	References to TRBHAs should be removed. **(AZ Department of Health Services)**	**Agree** The Administration has amended the language.
12	R9-31-1621(B)	References to TRBHAs should be removed. **(AZ Department of Health Services)**	**Agree** The Administration has amended the language.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rules:

Description	Date	Location
42 CFR 447.45	Feb. 15,1990	R9-31-1618

14. Was this rule previously adopted as an emergency rule?

No

15. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

CHAPTER 31. ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM CHILDREN'S HEALTH INSURANCE PROGRAM

ARTICLE 1. DEFINITIONS

Section
R9-31-101. Location of Definitions
R9-31-107. Standards for Payments Related Definitions
R9-31-116. Services for Native Americans Related Definitions

ARTICLE 5. GENERAL PROVISIONS AND STANDARDS

Section
R9-31-503. ~~Reinsurance~~ Repealed

ARTICLE 7. STANDARDS FOR PAYMENTS

Section
R9-31-702. Prohibitions Against Charges to Members
R9-31-703. Claims
R9-31-704. Transfer of Payments
R9-31-711. Copayments and Premiums
R9-31-713. Payments Made on Behalf of a Contractor; Recovery of Indebtedness
R9-31-719. Reinsurance

ARTICLE 16. SERVICES FOR NATIVE AMERICANS

Section
R9-31-1618. Claims Submission to the Administration
R9-31-1620. Prohibitions Against Charges to Members
R9-31-1621. Transfer of Payments
R9-31-1623. ~~Copayments and Premiums~~ Repealed

ARTICLE 1. DEFINITIONS

R9-31-101 Location of Definitions

A. Location of definitions. Definitions applicable to 9 A.A.C. 31 are found in the following.

Definition	Section or Citation
"ADHS"	R9-31-112
"Administration"	A.R.S. § 36-2901
"Adverse action"	R9-31-108

"Aggregate"	R9-22-107
"AHCCCS"	R9-31-101
"AHCCCS registered provider"	R9-22-101
"Ambulance"	R9-22-102
"Ancillary department"	R9-22-107
"Applicant"	R9-31-101
"Application"	R9-31-101
"Behavior management service"	R9-31-112
"Behavioral health professional"	R9-31-112
"Behavioral health evaluation"	R9-31-112
"Behavioral health medical practitioner"	R9-31-112
"Behavioral health service"	R9-31-112
"Behavioral health technician"	~~R9-31-112~~ R9-20-101
"Billed charges"	R9-22-107
"Board-eligible for psychiatry"	R9-31-112
"Capital costs"	R9-22-107
"Certified nurse practitioner"	R9-31-102
"Certified psychiatric nurse practitioner"	R9-31-112
"Child"	42 U.S.C. 1397jj
"Chronically ill"	A.R.S. § 36-2983
"Clean claim"	A.R.S. § 36-2904
"Clinical supervision"	R9-31-112
"CMDP"	R9-31-103
"Continuous stay"	R9-22-101
"Contract"	R9-22-101
"Contractor"	A.R.S. § 36-2901
"Contract year"	R9-31-101
"Copayment"	R9-22-107
"Cost avoidance"	R9-31-110
"Cost-to-charge ratio"	R9-22-107
"Covered charges"	R9-31-107
"Covered services"	R9-22-102
"CPT"	R9-22-107
"CRS"	R9-31-103
"Date of eligibility posting"	R9-22-107
"Day"	R9-22-101
"De novo hearing"	42 CFR 431.201
"Dentures"	R9-22-102
"DES"	R9-31-103
"Determination"	R9-31-103
"Diagnostic services"	R9-22-102
"Director"	A.R.S. § 36-2981
"DME"	R9-22-102
"DRI inflation factor"	R9-22-107
"Emergency medical condition"	42 U.S.C. 1396b(v)
"Emergency medical services"	R9-22-102
"Encounter"	R9-22-107
"Enrollment"	R9-31-103
"Experimental services"	R9-22-101
"Facility"	R9-22-101
"Factor"	R9-22-101
"First-party liability"	R9-22-110
"FPL"	A.R.S. § 36-2981
"Grievance"	R9-22-108
"Group Health Plan"	42 U.S.C. 1397jj
"GSA"	R9-22-101
"Head of Household"	R9-31-103
"Health care practitioner"	R9-31-112
"Hearing"	R9-22-108

"Hearing aid"	R9-22-102
"Home health services"	R9-22-102
"Hospital"	R9-22-101
"Household income"	R9-31-103
"ICU"	R9-22-107
"IGA"	R9-31-116
"IHS"	R9-31-116
"IHS" or "Tribal Facility Provider"	R9-31-116
"Information"	R9-31-103
"IMD"	42 CFR 435.1009 and ~~R9-31-112~~ R9-22-112
"Inmate of a public institution"	42 CFR 435.1009
"Inpatient hospital services"	R9-31-101
"License" or "licensure"	R9-22-101
"Medical record"	R9-22-101
"Medical review"	R9-31-107
"Medical services"	R9-22-101
"Medical supplies"	R9-22-101
"Member"	A.R.S. § 36-2981
"Mental disorder"	~~R9-31-112~~ A.R.S. § 36-501
"Native American"	R9-31-101
"New hospital"	R9-22-107
"NF" or "Nursing facility"	42 U.S.C. 1396r(a)
"NICU"	R9-22-107
"Noncontracting provider"	A.R.S. § 36-2981
"Occupational therapy"	R9-22-102
"Offeror"	R9-31-106
"Operating costs"	R9-22-107
"Outlier"	R9-31-107
"Outpatient hospital service"	R9-22-107
"Ownership change"	R9-22-107
"Partial care"	R9-31-112
"Peer group"	R9-22-107
"Pharmaceutical service"	R9-22-102
"Physical therapy"	R9-22-102
"Physician"	A.R.S. § 36-2981
"Post stabilization care services"	~~42 CFR 438.114~~ 42 CFR 438.113
"Practitioner"	R9-22-102
"Pre-existing condition"	R9-31-105
"Prepaid capitated"	A.R.S. § 36-2981
"Prescription"	R9-22-102
"Primary care physician"	A.R.S. § 36-2981
"Primary care practitioner"	A.R.S. § 36-2981
"Primary care provider (PCP)"	R9-22-102
"Primary care provider services"	R9-22-102
"Prior authorization"	R9-22-102
"Private duty nursing services"	R9-22-102
"Program"	A.R.S. § 36-2981
"Proposal"	R9-31-106
"Prospective rates"	R9-22-107
"Provider"	A.R.S. § 36-2931
~~"Prudent layperson standard"~~	~~42 U.S.C. 1396u-2~~
"PSP" or "Premium Sharing Program"	R9-31-103
"Psychiatrist"	R9-31-112
"Psychologist"	R9-31-112
"Psychosocial rehabilitation"	R9-31-112
"Qualified alien"	A.R.S. § 36-2903.03
"Qualifying plan"	A.R.S. § 36-2981
"Quality management"	R9-22-105
"Radiology services"	R9-22-102

"RBHA"	R9-31-112
"Rebasing"	R9-22-107
"Redetermination"	R9-31-103
"Referral"	R9-22-101
"Rehabilitation services"	R9-22-102
"Reinsurance"	R9-22-107
"Remittance advice"	R9-22-107
"RFP"	R9-31-106
"Respiratory therapy"	R9-22-102
"Respondent"	R9-22-108
"Scope of services"	R9-22-102
"SDAD"	R9-22-107
"Seriously ill"	R9-31-101
"Service location"	R9-22-101
"Service site"	R9-22-101
"SMI" or "Seriously mentally ill"	A.R.S. § 36-550
"Specialist"	R9-22-102
"Speech therapy"	R9-22-102
"Spouse"	R9-31-103
"SSI-MAO"	R9-31-103
"Stabilize"	42 U.S.C. 1395dd
"Standard of care"	R9-22-101
"Sterilization"	R9-22-102
"Subcontract"	R9-22-101
"Subcontractor"	R9-31-101
"Third-party"	R9-22-110
"Third-party liability"	R9-22-110
"Tier"	R9-22-107
"Tiered per diem"	R9-31-107
~~"Title XIX"~~	~~42 U.S.C. 1396~~
~~"Title XXI"~~	~~42 U.S.C. 1397aa~~
"TRBHA"	R9-31-116
"Tribal facility"	A.R.S. § 36-2981
"Utilization management"	R9-22-105

B. General definitions. The words and phrases in this Chapter have the following meanings unless the context explicitly requires another meaning:

"AHCCCS" means the Arizona Health Care Cost Containment System, which is composed of the Administration, contractors, and other arrangements through which health care services are provided to a member.

"Applicant" means a person who submits, or whose representative submits, a written, signed, and dated application for Title XXI benefits ~~that has not been approved or denied~~.

"Application" means an official request for Title XXI ~~benefits made in accordance with Article 3.~~ medical coverage made under this Chapter.

"Contract year" means the period beginning on October 1 and continuing until September 30 of the following year.

"Inpatient hospital services" means medically necessary services that require an inpatient stay in an acute care hospital. Inpatient hospital services are provided by or under the direction of a physician or other health care practitioner upon referral from a member's primary care provider.

"Native American" means Indian as specified in 42 CFR 36.1.

"Seriously ill" means a medical or psychiatric condition manifesting itself by acute symptoms that left untreated may result in:

Death,
Disability,
Disfigurement, or
Dysfunction.

"Subcontractor" means a person, agency, or organization that enters into an agreement with a contractor or subcontractor.

R9-31-107. Standards for Payments Related Definitions

Definitions. The words and phrases in this Chapter have the following meanings unless the context explicitly requires another meaning:

~~1.~~ "Covered charges" means billed charges that represent medically necessary, reasonable, and customary items of expense for Title XXI covered services that meet medical review criteria of the Administration or contractor.

~~2.~~ "Medical review" means a review involving clinical judgment of a claim or a request for a service before or after it is paid or rendered to ensure that services provided to a member are medically necessary and covered services and that required authorizations are obtained by the provider. The criteria for medical review are established by the contractor based on medical practice standards that are updated periodically to reflect changes in medical care.

~~3.~~ "Outlier" means a hospital claim or encounter in which the Title XXI inpatient hospital days of care have operating costs per day that meet the criteria described in A.A.C. R9-22-712.

~~4.~~ "Tiered per diem" means a payment structure in which payment is made on a per-day basis depending upon the tier into which the Title XXI inpatient hospital day of care is assigned.

R9-31-116. Services for Native Americans Related Definitions

Definitions. The words and phrases in this Chapter have the following meanings unless the context explicitly requires another meaning:

~~1.~~ "IGA" means ~~Intergovernmental Agreement~~ intergovernmental agreement.

~~2.~~ "IHS" means Indian Health Service.

~~3. "IHS or Tribal Facility Provider" means a person who is authorized by the IHS or Tribal Facility and registered as an AHCCCS provider to provide covered services to members. The IHS or Tribal Facility by authorizing the person to provide covered services, shall certify that the person meets all applicable federal and state requirements.~~ "IHS or Tribal Facility Provider" means a person who is authorized by the IHS or Tribal Facility to provide covered services to members and:

Is an AHCCCS registered provider, and

Is certified by the IHS or Tribal Facility as meeting all applicable federal and state requirements.

~~4. "TRBHA" means the Tribal Regional Behavioral Health Authority. Tribal governments, through an IGA with ADHS may operate a Tribal Regional Behavioral Health Authority for the provision of behavioral health services to a Native American member residing on reservation.~~ "TRBHA" means a Tribal Regional Behavioral Health Authority operated by a tribal government through an IGA with ADHS for the provision of behavioral health services to a Native American member residing on reservation.

R9-31-503. ~~Reinsurance~~ Repealed

~~**A.** Contractor-acquired reinsurance. As specified in A.R.S. § 36-2988, a contractor may obtain reinsurance for coverage of prepaid capitated members. A contractor shall not obtain reinsurance to reduce liability below 25% of the applicable deductible level during any Title XXI contract year. This limitation does not apply to reinsurance obtained by a contractor to cover the cost of services provided by noncontracting providers and nonproviders to a member under emergency circumstances.~~

~~**B.** Administration reinsurance. For purposes of the Administration's reinsurance program, the insured entity shall be a prepaid plan with which the Administration contracts. Only costs incurred during the contract year in which a member is enrolled with a contractor qualify for reinsurance. Any movement of a member from membership with 1 contractor to membership with another contractor shall be cause for resetting the deductible level unless resetting is waived by the Administration.~~

~~**C.** Encounter submission. A contractor shall prepare, review, verify, certify, and submit, encounters for consideration to the Administration.~~

~~1. The contractor shall certify that the services listed were actually rendered, medically necessary, and within the scope of Title XXI benefits.~~

~~2. The contractor shall submit encounters in the format prescribed by the Administration.~~

~~3. The contractor shall initiate and evaluate an encounter for probable 1st- and 3rd-party liability before submitting the encounter for reinsurance consideration to the Administration, unless the encounter involves underinsured or uninsured motorist liability insurance, 1st- and 3rd-party liability insurance, or a tort-feasor.~~

~~4. The Administration shall not consider a reinsurance claim for payment unless the claim is received by the AHCCCS Claims Administration not later than 12 months after the date of service.~~

~~**D.** Encounter processing. The Administration shall process reinsurance associated or related encounters submitted by a contractor.~~

~~1. The Administration shall accept for processing only those encounters that are submitted directly by a Title XXI contractor and that comply with the conditions in subsections (B), (C), (E), and (F).~~

~~2. The Administration shall establish and maintain separate records of all reinsurance cases established and all payments and case reviews made to the contractor as a result of these cases.~~

3. ~~The Administration shall subject a contractor to utilization of services and other evaluative reviews of care provided to a member that result in a reinsurance case.~~

~~**E.** Payment of reinsurance cases. The Administration shall reimburse a contractor for costs incurred in excess of the applicable deductible level calculated according to the provisions of A.A.C. R9-22-703.~~

~~**F.** The Administration may limit reinsurance reimbursement to a lower or alternative level of care if the Director or designee determines that the less costly alternative could and should have been used by the contractor. A contractor whose reinsurance case is reduced or denied shall be notified in writing by the Administration. The notification shall include the cause for reduction or denial and describe the applicable grievance and appeal process available under 9 A.A.C. 31, Article 8.~~

~~**G.** The Administration or its contractors may arrange special contractual reinsurance terms for catastrophic cases. Catastrophic cases include, but are not limited to organ and bone marrow transplants (excluding kidney and cornea transplants which are covered under regular reinsurance), and hemophiliac cases. The contractor shall notify the Administration when a member is identified for possible reimbursement of Title XXI approved catastrophic cases. The determination of whether a case or type of case is catastrophic shall be made by the Director based on the following criteria:~~

1. ~~Severity of medical condition, including prognosis; and~~
2. ~~Average cost or average length of hospitalization and medical care, or both, in Arizona for the type of case under consideration.~~

ARTICLE 7. STANDARDS FOR PAYMENTS

R9-31-702. Prohibitions Against Charges to Members

~~**A.** A contractor, subcontractor, or other provider of care or services shall not charge, submit a claim, demand, or otherwise collect payment from a member or a person acting on behalf of a member for any covered service except to collect an authorized co-payment or payment for additional services. A contractor shall have the right to recover from a member that portion of payment made by a 3rd party to the member when the payment duplicates Title XXI paid benefits and has not been assigned to the contractor. A contractor who makes a claim under this provision shall not charge more than the actual, reasonable cost of providing the covered services.~~

~~**B.** A provider shall not bill or make any attempt to collect payment, directly or through a collection agency, from an individual claiming to be Title XXI eligible without 1st receiving verification from the Administration that the individual was ineligible for Title XXI on the date of service or that the services provided were not covered by Title XXI as specified in A.R.S. § 36-2987.~~

~~**C.** A provider, including a noncontracting provider, may bill a member for medical expenses incurred during a period of time when the member willfully withheld material information from the provider or gave false information to the provider pertaining to the member's Title XXI eligibility or enrollment status that caused payment to be denied~~.

A. Except as provided in subsection (B), an AHCCCS registered provider shall not do either of the following, unless services are not covered or without first receiving verification from the Administration that the person was ineligible for AHCCCS on the date of service:

1. Charge, submit a claim to, demand or collect payment from a person claiming to be AHCCCS eligible; or
2. Refer or report a person claiming to be AHCCCS eligible to a collection agency or credit reporting agency.

B. An AHCCCS registered provider may charge, submit a claim to, demand or collect payment from a member as follows:

1. To collect an authorized copayment;
2. To pay for non-covered services;
3. To recover from a member that portion of a payment made by a third-party to the member if the payment duplicates AHCCCS paid benefits and is not assigned to a contractor under R9-31-1002(B). An AHCCCS registered provider that makes a claim under this Article shall not charge more than the actual, reasonable cost of providing the covered service; or
4. To bill a member for medical expenses incurred during a period when the member intentionally withheld information or intentionally provided inaccurate information pertaining to the member's AHCCCS eligibility or enrollment that caused the payment to the provider to be reduced or denied.

R9-31-703. Claims

A. Claims submission to contractors. ~~A provider~~ An AHCCCS registered provider shall submit to a contractor all claims for services rendered to a member enrolled with the contractor as specified in R9-31-705.

B. ~~Overpayments for Title XXI services. When a Title XXI overpayment is made to a contractor, the contractor shall notify the Administration that an overpayment was made. The Administration shall recoup an overpayment from a future claim cycle, or, at the discretion of the Director, require the contractor to return the incorrect payment to the Children's Health Insurance Program Fund.~~

Overpayments for AHCCCS Services.

1. An AHCCCS registered provider shall notify the Administration when the provider discovers an overpayment was made by the Administration.

2. The Administration shall recoup an overpayment from a future claim cycle if an AHCCCS registered provider fails to return the incorrect payment amount to the Administration.

R9-31-704. Transfer of Payments

~~**A.** Payments permitted. Payments may be made to other than the contractor as follows:~~
~~1. When payment is made in accordance with an assignment to a government agency or an assignment made according to a court order; or~~
~~2. When payment is made to a business agent, such as a billing service or accounting firm, who renders statements and receives payment in the name of a contractor providing that the agent's compensation for this service is:~~
~~a. Reasonably related to the cost of processing the statements,~~
~~b. Not dependent upon the actual collection of payment.~~
~~**B.** Prohibition of payments to factors. Payment for covered services furnished to a member by a contractor shall not be made to, or through a factor, either directly, or by virtue of a power of attorney given to the factor.~~

A. Billing agent. For purposes of this Section, a business agent is a firm such as a billing service or accounting firm that renders statements and receives payment in the name of the contractor or AHCCCS registered provider.

B. Allowable transfer of payments. The Administration or the contractor may make payments to other than the AHCCCS registered provider, and the Administration may make payments to other than the contractor after considering whether:
1. There is an assignment to a government agency or an assignment under a court order; or
2. A business agent's compensation is:
a. Related to the cost of processing the statements; and
b. Not dependent upon the actual collection of payment.

C. Prohibition of transfer of payments to factors. The Administration shall not make payment for covered services furnished to a member by a contractor or an AHCCCS registered provider to, or through a factor, either directly, or by virtue of a power of attorney given to the factor.

R9-31-711. Copayments and Premiums

A. Contractors ~~shall be responsible for collecting~~ shall collect a $5.00 copayment from a member for non-emergency use of the emergency room.
B. A contractor shall ensure that a member is not denied services because of the member's inability to pay a copayment.
C. The Administration ~~shall establish~~ addresses standards for premiums ~~as discussed in~~ under 9 A.A.C. 31, Article 14.

R9-31-713. Payments Made on Behalf of a Contractor; Recovery of Indebtedness

A. The Administration may make payments on behalf of a contractor in order to prevent a suspension or termination of ~~Title XXI~~ AHCCCS services ~~when either~~ after considering whether:
~~1. No payment period is specified by subcontract and a valid accrued claim is not paid within 30 days of receipt by the contractor, or~~
~~2. A valid accrued claim is not paid within the period under subcontract.~~
1. A contractor does not adjudicate a valid accrued claim within the period set forth under subcontract, or
2. A contractor does not adjudicate 99 percent of valid accrued claims within 90 days of receipt from the AHCCCS registered provider.

~~**B.** In the event a payment is made by the Administration according to this Article, the Administration shall reduce the capitation payment due a contractor by the amount of payment made, plus a 10% administrative fee for each claim that is paid.~~

~~**C.**~~**B.** If a contractor or a subcontracting provider receives an overpayment or otherwise becomes indebted to the Administration, the contractor or subcontracting provider shall immediately remit ~~such funds~~ the amount of the indebtedness or overpayment to the Administration for deposit in the Children's Health Insurance Program Fund.

~~**D.** The action of the Administration to recover amounts from contractors or subcontracting providers may include the following:~~
~~1. Negotiation of a repayment agreement executed with the Administration.~~
~~2. Withholding or offsetting against current or future prepayments or other payments to be paid to the contractor or subcontracting provider.~~
~~3. Enforcement of, or collection against, the performance bond or withhold as specified in A.R.S. § 36-2986.~~

C. The Administration may recover the indebtedness or overpayment from a contractor or a subcontracting provider in circumstances including the following:
1. Negotiation of a repayment agreement executed with the Administration,
2. Withholding or offsetting against current or future prepayments or other payments to be paid to the contractor or subcontracting provider, or
3. Enforcement of, or collection against, the performance bond, deposit, financial reserve, or other financial security under A.R.S. § 36-2986.

~~**E.**~~**D.** Except as specifically provided for in ~~these rules~~ this Article, the Administration ~~shall~~ is not ~~be~~ liable for payment for medical expenses incurred by members enrolled with contractors.

R9-31-719. Reinsurance

A contractor shall submit to the Administration all reinsurance claims for services rendered to a member enrolled with the contractor as specified in R9-22-720.

ARTICLE 16. SERVICES FOR NATIVE AMERICANS

R9-31-1618. Claims Submission to the Administration

~~**A.** Claims submission to the Administration.~~

~~1. The IHS, a Tribal Facility, a TRBHA, or a provider under referral shall ensure that a claim for covered services provided to a member is initially received by the Administration not later than six months from the date of service. The Administration shall deny a claim not received within the six month period from the date of service. If a claim meets the six month limitation, the IHS, a Tribal Facility, a TRBHA, or a provider under referral shall file a clean claim which is received by the Administration not later than 12 months from the date of service.~~

~~2. The six and twelve month deadlines for an inpatient hospital claim begin on the date of discharge for each claim.~~

~~**B.** Claims processing.~~

~~1. If a claim contains erroneous or conflicting information, exceeds parameters, fails to process correctly, does not match the Administration's files, or requires manual review to be resolved, the Administration shall report the claim to a provider with a remittance explanation.~~

~~2. The Administration shall process a hospital claim in accordance with A.A.C. R9-22-712.~~

~~**C.** Overpayments for Title XXI services. An IHS or a Tribal Facility provider, a noncontracting provider, or a Tribal Facility, shall notify the Administration if an overpayment is made. The Administration shall recoup an overpayment from a future claim cycle, or, at the discretion of the Director, require the IHS or a Tribal Facility provider or a noncontracting provider, to return the incorrect payment to the Administration.~~

A. Timely Submission of Claims.

1. Under A.R.S. § 36-2904(H)(3), the Administration regards a paper or electronic claim as submitted on the date that it is received by the Administration. The Administration shall do one or more of the following for each claim it receives:
   a. Place a date stamp on the face of the claim,
   b. Assign a system-generated claim reference number, or
   c. Assign a system-generated date-specific number.
2. Except as provided in subsection (A)(6), the IHS, a Tribal Facility, or a provider under referral shall initially submit a claim for covered services to the Administration not later than:
   a. Six months from the date of service; or
   b. Six months from the date of eligibility posting, whichever is later.
3. The Administration shall deny the claim if the claim is not initially submitted within:
   a. The six-month period from the date of service; or
   b. Six months from the date of eligibility posting, whichever is later.
4. Except as provided in subsection (A)(6), if the IHS, a Tribal Facility, or a provider under referral submits an initial claim within the six-month period noted in subsection (A)(2), the IHS, Tribal Facility, or provider shall submit a clean claim to the Administration not later than:
   a. 12 months from the date of service; or
   b. 12 months from the date of eligibility posting, whichever is later.
5. The claim is clean when it meets the requirements under A.R.S. § 36-2904(H).
6. Under A.R.S. § 36-2987, the IHS, a Tribal Facility, or a provider under referral shall:
   a. Initially submit a claim for inpatient hospital services not later than six months from the date of member discharge for each claim, and
   b. Submit a clean claim for inpatient hospital services not later than 12 months from the date of discharge for each claim.

B. Claims Processing

1. The Administration shall notify the IHS, a Tribal Facility, or a provider under referral with a remittance advice when a claim is processed for payment.
2. The Administration shall pay valid clean claims in a timely manner according to 42 CFR 447.45, February 15, 1990, which is incorporated by reference and on file with the Administration and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments.
   a. 90 percent of valid clean claims shall be paid within 30 days of the date of receipt of the claim;
   b. 99 percent of valid clean claims shall be paid within 90 days of the date of receipt of the claim; and
   c. The remaining one percent of valid clean claims shall be paid within 12 months of the date of receipt of a claim.
3. A claim is paid on the date indicated on the disbursement check.
4. A claim is denied as of the date of the remittance advice.
5. The Administration shall process a hospital claim according to R9-22-712.

C. Overpayments for Title XXI Services.
1. The IHS, a Tribal Facility, or a provider under referral shall notify the Administration when the provider discovers an overpayment was made by the Administration.
2. The Administration shall recoup an overpayment from a future claim cycle if the IHS, a Tribal Facility, or a provider under referral fails to return the incorrect payment amount to the Administration.

D. Postpayment Claims Review.
1. The Administration shall conduct postpayment review of claims paid by the Administration if monies have been erroneously paid to the IHS, a Tribal Facility, or a provider under referral.
2. The Administration shall recoup an overpayment from a future claim cycle if the IHS, a Tribal Facility, or a provider under referral fails to return the incorrect payment amount to the Administration.
3. The Administration shall document any recoupment of an overpayment on a remittance advice.
4. The IHS, a Tribal Facility, or a provider under referral may file a grievance or request for hearing under Article 8 of this Chapter if the AHCCCS registered provider disagrees with the recoupment action.

E. Claims Review
1. The IHS, a Tribal Facility, or a provider under referral shall:
   a. Obtain prior authorization from the Administration for non-emergency hospital admissions and covered services as specified in Articles 2 and 12 of this Chapter,
   b. Notify the Administration of hospital admissions under Article 2, and
   c. Make records available for review by the Administration.
2. The Administration shall reduce payment of or deny a claim if the IHS, Tribal Facility, or a provider under referral fails to obtain prior authorization or to notify the Administration under Article 2 and this Article.
3. The Administration may conduct prepayment medical review and post-payment review on all hospital claims, including outlier claims.
4. If the Administration issues prior authorization for a specific level of care but subsequent medical review indicates that a different level of care was medically appropriate, the claim shall be paid, or adjusted to pay, for the cost of the appropriate level of care.
5. Post-payment reviews shall comply with A.R.S. § 36-2987.

R9-31-1620. Prohibitions Against Charges to Members

~~**A.** The IHS or a Tribal Facility or other provider of care or services shall not charge, submit a claim, demand, or otherwise collect payment from a member or a person acting on behalf of a member for any covered service except to collect an authorized copayment or payment for additional services. The Administration shall have the right to recover from a member that portion of payment made by a 3rd party to a member when the payment duplicates Title XXI paid benefits and has not been assigned to the IHS or a Tribal Facility. The IHS or a Tribal Facility who makes a claim under this provision shall not charge more than the actual, reasonable cost of providing the covered services.~~

~~**B.** An IHS or a Tribal Facility provider shall not bill or make any attempt to collect payment, directly or through a collection agency, from an individual claiming to be Title XXI eligible without 1st receiving verification from the Administration that the individual was ineligible for Title XXI on the date of service or that the services provided were not covered by Title XXI as specified in A.R.S. § 36-2989.~~

A. Except as provided in subsection (B), the IHS, a Tribal Facility, or a provider under referral, shall not do either of the following, unless services are not covered or without first receiving verification from the Administration that the person was ineligible for AHCCCS on the date of service:
1. Charge, submit a claim to, demand or collect payment from a person claiming to be AHCCCS eligible; or
2. Refer or report a person claiming to be AHCCCS eligible to a collection agency or credit reporting agency.

B. The IHS, a Tribal Facility, or a provider under referral may charge, submit a claim to, demand or collect payment from a member as follows:
1. To collect an authorized copayment;
2. To pay for non-covered services;
3. To recover from a member that portion of a payment made by a third-party to the member if the payment duplicates AHCCCS paid benefits and is not assigned to a contractor. An AHCCCS registered provider that makes a claim under this Article shall not charge more than the actual, reasonable cost of providing the covered service; or
4. To bill a member for medical expenses incurred during a period when the member intentionally withheld information or intentionally provided inaccurate information pertaining to the member's AHCCCS eligibility or enrollment that caused the payment to the provider to be reduced or denied.

R9-31-1621. Transfer of Payments

~~Payments permitted. Payments may be made to other than the IHS, a Tribal Facility, or a referral provider as follows:~~
1. ~~Payment made in accordance with an assignment to a government agency or an assignment made according to a court order; or~~

~~2. Payment made to a business agent, such as a billing service or accounting firm, who renders statements and receives payment in the name of the IHS, a Tribal Facility, or a provider providing that an agent's compensation for this service is:~~
~~a. Reasonably related to the cost of processing the statements, and~~
~~b. Not dependent upon the actual collection of payment.~~

A. Business agent. For purposes of this Section, a business agent is a firm such as a billing service or accounting firm that renders statements and receives payment in the name of the contractor or AHCCCS registered provider.

B. Allowable transfer of payments. The Administration may make payments to other than the IHS, a Tribal Facility, or a provider under referral after considering whether:
1. There is an assignment to a government agency or there is an assignment under a court order; or
2. A business agent's compensation is:
   a. Related to the cost of processing the statements; and
   b. Not dependent upon the actual collection of payment.

R9-31-1623. ~~Copayments and Premiums~~ Repealed

~~**A.** The IHS or a Tribal Facility shall be responsible for collecting a $5.00 copayment from a member for non-emergency use of the emergency room.~~

~~**B.** The IHS or a Tribal Facility shall ensure that a member is not denied services because of a member's inability to pay a copayment.~~

~~**C.** The Administration shall establish standards for premiums as discussed in 9 A.A.C. 31, Article 14.~~

NOTICE OF FINAL RULEMAKING

TITLE 12. NATURAL RESOURCES

CHAPTER 7. OIL AND GAS CONSERVATION COMMISSION

PREAMBLE

1. Sections Affected | **Rulemaking Action**

R12-7-129	Amend
R12-7-140	Amend

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 27-516(A) and 27-656

Implementing statutes: A.R.S. §§ 27-502(A)(6), 27-506(C) and (D), 27-652(A), and 27-658

3. The effective date of the rules:

July 15, 2002

4. A list of all previous notices appearing in the Register addressing the final rules:

Notice of Rulemaking Docket Opening: 8 A.A.R. 268, January 11, 2002

Notice of Proposed Rulemaking: 8 A.A.R. 643, February 15, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Steven L. Rauzi, Oil & Gas Administrator

Address: Arizona Geological Survey
416 W. Congress, Suite 100
Tucson, AZ 85701-1315

Telephone: (520) 770-3500

Fax: (520) 770-3505

6. An explanation of the rule, including the agency's reasons for initiating the rule:

R12-7-129 specifies requirements for converting wells drilled for oil or gas to water wells. R12-7-140 specifies requirements regarding pollution, surface damage, and noise abatement. The Commission is amending R12-7-129 to correct an incorrect citation and R12-7-140 to improve clarity and understandability.

7. A reference to any study that the agency relied on in its evaluation of or justification for the rule and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

None

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

These rules directly impact companies drilling for oil, gas, and geothermal resources. The rules are mostly procedural in nature and will not significantly impact the economy or have a significant impact upon small businesses or consumers. The proposed rulemaking does not significantly increase or decrease the costs of compliance. The corrected statutory citation and resulting clarity and understandability will have a positive impact on small businesses. No private persons or consumers are directly affected by the proposed rulemaking.

10. A description of the changes between the proposed rules, including supplemental notices, and the final rules (if applicable):

Changes were made at the suggestion of the Governor's Regulatory Review Council's staff to improve the clarity, conciseness, and understandability of the rules.

11. A summary of the principal comments and the agency response to them:

No written comments were received. No oral comments were received at the April 19, 2002 oral proceeding to adopt the amended rules.

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

13. Incorporation by reference and their location in the rules:

None

14. Was this rule previously adopted as an emergency rule?

No

15. The full text of the rules follows:

TITLE 12. NATURAL RESOURCES

CHAPTER 7. OIL AND GAS CONSERVATION COMMISSION

ARTICLE 1. OIL, GAS, HELIUM, AND GEOTHERMAL RESOURCES

Section

ARTICLE 1. OIL, GAS, HELIUM, AND GEOTHERMAL RESOURCES

R12-7-129. Wells to be Used ~~for Fresh~~ as Water Wells

A. The landowner, ~~the~~ landowner's agent, or lessee may use any well or exploratory hole as a ~~freshwater~~ water well provided that:

1. Written approval is ~~has been~~ obtained from the Arizona Department of Water Resources;
2. The operator ~~has plugged~~ plugs the well in accordance with R12-7-127 to a point immediately below the freshwater strata; and
3. The landowner, ~~the~~ landowner's agent, or lessee assumes responsibility for the well and ~~its final plugging~~ compliance with the provisions of A.R.S. Title 45, Chapter 2 in a signed and notarized water-well ~~acceptance~~ responsibility form provided by and filed with the Commission.

B. After filing ~~Filing of~~ the notarized water-well ~~acceptance~~ responsibility form with the Commission, ~~shall constitute the obligation of~~ the landowner, ~~the~~ landowner's agent, or lessee ~~to plug the well in compliance with the provisions of the State Water Code, A.R.S. Title 45, Chapter 1~~ shall comply with A.R.S. Title 45, Chapter 2 before modification or abandonment of the well.

C. Upon filing the notarized water-well ~~acceptance~~ responsibility form with the Commission, the Commission shall notify the bonding company and operator in writing so that the bond may be cancelled or made no longer effective with respect to that well.

R12-7-140. Pollution, Surface Damage, and Noise Abatement

A. ~~Each~~ An operator of ~~any~~ a well, production facility, gasoline plant, gas plant, or pipeline shall conduct operations in a manner that ~~will prevent~~ prevents surface or subsurface pollution.

B. ~~During completion operations on any well, no~~ An operator shall conduct operations in a manner that prevents oil, gas, salt water, fracturing fluid~~,~~ or any other substance ~~shall be permitted to pollute any waters,~~ from polluting any surface or subsurface waters.

C. ~~In~~ During swabbing and bailing operations or when purging a well, all substances removed from the bore hole shall be placed in a pit or tank and shall not be allowed to pollute any surface or subsurface waters.

D. ~~All~~ An operator shall maintain all wellhead connections, surface equipment, lease flow lines, and tank batteries ~~shall be maintained~~ at all times to prevent the escape of oil, gas, produced water, or any other ~~substances~~ substance.

E. ~~All fires, leaks, or blowouts shall be reported~~ An operator shall report any fire, leak, or blowout to the Commission in accordance with R12-7-120. ~~Pits shall be~~ An operator shall ensure that any pit is constructed and operated in accordance with R12-7-108.

F. ~~Each~~ An operator shall minimize noise when conducting air drilling operations~~,~~ or when the well is allowed to produce while drilling~~, or as a result of the noise created by expanding gases~~. An operator shall ensure that the welfare of the operating personnel and the public is not negatively affected by the noise created by the expanding gases. ~~The method and degree of noise abatement shall be approved by the Commission.~~

NOTICE OF FINAL RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY AIR POLLUTION CONTROL

PREAMBLE

1. Sections Affected — **Rulemaking Action**

R18-2-715	Amend
R18-2-715.01	Amend

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing and implementing statutes: A.R.S. §§ 49-104(A)(11), 49-404, 49-425, and 49-426

3. The effective date of the rules:

July 18, 2002

4. List of all previous notices appearing in the Register addressing the proposed rules:

Notice of Rulemaking Docket Opening: 8 A.A.R. 1111, March 15, 2002

Notice of Proposed Rulemaking: 8 A.A.R. 1179, March 22, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name:	Mark Lewandowski
Address:	ADEQ, 3033 N. Central Avenue Phoenix, AZ 85012-2809
Telephone:	(602) 207-2230. If you are outside the (602) area code dial (800) 234-5677, and ask for the extension.
Fax:	(602) 207-2366

6. An explanation of the rules, including the agency's reasons for initiating the rules:

Summary. The Arizona Department of Environmental Quality has finalized reductions in emission limits applicable to two copper smelters: one located in Hayden, Gila County, and one located in Miami, Gila County. The rules set a lower level of allowed emissions for each smelter.

Because of measured exceedances of the national ambient air quality standards for sulfur dioxide (SO_2), both the Hayden and the Miami areas were designated nonattainment for SO_2 in 1979. The emissions limits that were previously in R18-2-715 were adopted in 1979 as a means of lowering stack emissions of SO_2 from the smelters. Because R18-2-715 will be a control measure for the air quality State Implementation and Maintenance Plans (SIPs) for the Hayden and Miami SO_2 nonattainment areas, updated air quality impact analyses were performed for both smelters. These analyses demonstrate future air quality protection based on current and expected future operation levels. The

new limits finalized in R18-2-715 demonstrate that the smelters are not expected to cause or contribute to a violation of the national ambient air quality standards for SO_2.

For the Hayden smelter, the rule incorporates lower SO_2 stack emission limits and adds new limits for fugitive emissions. For the Miami smelter, the rule incorporates lower SO_2 stack emission limits and includes an overall combined limit for stack and fugitive sources. The rule revisions for the Miami smelter correspond to limits already contained in the facility's permit. The new limits for both the Hayden and Miami smelters also required minor changes to the compliance and monitoring provisions in R18-2-715.01.

Additional amendments to R18-2-715 were made to update the rule by removing those sections with emissions limits for smelters that are no longer operating. The rule sections removed were: R18-2-715(F)(3) for the defunct copper smelter of ASARCO, Inc., Ray Mines Division in Hayden, Pinal County; R18-2-715(F)(5) for the defunct copper smelter of Phelps Dodge Corporation, New Cornelia Branch in Ajo, Pima County; and R18-2-715(F)(6) for the defunct copper smelter of Phelps Dodge Corporation, Morenci Branch in Morenci, Greenlee County.

7. A reference to any study that the agency relied on its evaluation of or justification for the final rules and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

Not applicable

8. A showing of good cause why the rules are necessary to promote a statewide interest if the rules will diminish a previous grant of authority of a political subdivision of the state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

This rule is primarily a source-specific rulemaking pertaining to the smelter located in Hayden, Gila County, and the smelter located in Miami, Gila County. The Hayden smelter is currently owned and operated by ASARCO Incorporated. The Miami smelter is currently owned and operated by Phelps Dodge Corporation. The Hayden and Miami facilities are classified as major sources for sulfur dioxide and both areas are designated as nonattainment for sulfur dioxide. This rule incorporates lower emissions limits for sulfur dioxide applicable to both smelters.

Subsequent to codification of the rule in 1979, numerous improvements have been implemented at the smelters. ASARCO representatives indicated that more than $123,000,000 was spent in upgrading and rebuilding the facility since 1983 for various reasons, including replacing outdated and worn out equipment and introducing more efficient technology. The changes include improved emissions collection systems, process and control technology, as well as implementation of an improved data collection, recordkeeping, and reporting infrastructure. Similar improvements at the Miami facility are reported by Phelps Dodge representatives to have cost more than $100,000,000.

The current rule revisions are not expected to result in significant additional costs to either smelter. As previously explained, expenditures for emissions collection and control technology have already been incurred and are not attributed to the current rulemaking. No additional labor needs will be generated by the rule. The new emission limits may, however, require updates of the existing data collection, recordkeeping, and reporting infrastructure. Representatives of the ASARCO smelter at Hayden report an estimated one-time expenditure of $5,000 to $10,000 for computer software. Similar data collection and reporting upgrades at the Miami smelter are estimated by representatives of Phelps Dodge to also be a one-time expenditure, at a cost of $4,000 to $6,000.

The exemption of steam generation from the counting of SO_2 emissions in R18-2-715.01(T) and (U) will not have an economic impact on sources since emissions from steam generation, including limits on SO_2, are already covered under R18-2-703.

The Arizona Department of Environmental Quality does not anticipate that the rule changes applicable to the closed smelters will have any substantive economic impact. In all cases, the local citizens may benefit because of lower social costs associated with improved air quality.

Impact on Small Business.

A.R.S. § 41-1055(B)(5) requires agencies to state the probable impact of a rulemaking on small businesses. A.R.S. § 41-1035 requires agencies to reduce the impact of a rule on small businesses by using certain methods when they are legal and feasible in meeting the statutory objectives for the rulemaking. "Small business" is defined in A.R.S. § 41-1001 as "a concern, including its affiliates, which is independently owned and operated, which is not dominant in its field and which employs fewer than one hundred full-time employees or which had gross annual receipts of less than four million dollars in its last fiscal year. For purposes of a specific rule, an agency may define small business to include more persons if it finds that such a definition is necessary to adapt the rule to the needs and problems of small businesses and organizations." Based on the number and size of Arizona copper smelters, ADEQ has determined that this rule does not impact any small businesses.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules:

The only changes made between the proposed rule and the rule submitted to the Council were in R18-2-715(F)(2) and (G)(2), and R18-2-715.01(T) and (U). The changes are shown below with strike out (~~strike out~~) and underline.

R18-2-715. Standards of Performance for Existing Primary Copper Smelters; Site-specific Requirements

A. No change

B. No change

C. No change

D. No change

E. No change

F. Except as provided in a consent decree or a delayed compliance order, the owner or operator of any primary copper smelter shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from any stack required to be monitored by R18-2-715.01(K) in excess of the following:

1. For the copper smelter located near San Manuel, Arizona at latitude 32°36'58"N and longitude 110°37'19"W:
   a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed 1,742 pounds per hour.
   b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)
0	9803
1	8253
2	7619
4	6072
7	5660
12	4922
20	4515
32	4272
48	3945
68	3727
94	3568
130	3419
180	3253
245	3101
330	2958
435	2831
560	2712
710	2615
890	2525
1100	2440
1340	2366
1610	2290
1910	2216
2240	2142

2. For the copper smelter located near Hayden, Arizona at latitude 33°0'29"N and longitude 110°47'17"W:
   a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed ~~7066~~ 6882 pounds per hour.
   b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)	
0	~~25,300~~	24,641
1	~~23,585~~	22,971
2	~~22,285~~	21,705
4	~~20,830~~	20,322
7	~~19,834~~	19,387
12	~~19,177~~	18,739
20	~~18,079~~	17,656
32	~~17,407~~	16,988
48	~~16,752~~	16,358
68	~~16,130~~	15,808
94	~~15,458~~	15,090
130	~~14,803~~	14,423
180	~~14,129~~	13,777
245	~~13,540~~	13,212
330	~~12,987~~	12,664
435	~~12,438~~	12,129
560	~~11,919~~	11,621
710	~~11,457~~	11,165
890	~~10,934~~	10,660
1100	~~10,472~~	10,205
1340	~~9,999~~	9,748
1610	~~9,562~~	9,319
1910	~~9,185~~	8,953
2240	~~8,778~~	8,556

3. For the copper smelter located near Miami, Arizona at latitude 33°24’50”N and longitude 110°51’25”W:
   a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed 604 pounds per hour.
   b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)
0	8,678
1	7,158
2	5,903
4	4,575
7	4,074
12	3,479
20	3,017
32	2,573
48	2,111
68	1,703
94	1,461
130	1,274
180	1,145
245	1,064

330	1,015
435	968
560	933
710	896
890	862
1100	828
1340	797
1610	765
1910	739
2240	712

G. Except as provided in a consent decree or a delayed compliance order, the owner or operator of the copper smelters listed below shall not discharge or cause the discharge of fugitive sulfur dioxide into the atmosphere in excess of the following:

1. For the copper smelter located near San Manuel, Arizona at latitude 32°36'58"N and longitude 110°37'19"W:
   a. Annual average emissions calculated under R18-2-715.01(R) shall not exceed 715 pounds per hour for converter roof fugitive emissions; and
   b. The number of three-hour average emissions for converter roof fugitive emissions, calculated under R18-2-715.01(R) shall not exceed n cumulative occurrences in excess of E_f, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(R)(8):

n, Cumulative Occurrences	E_f, (lb/hr)
0	4462
1	4299
2	4222
4	4017
7	3867
12	3460
20	3179
32	3000
48	2827
68	2649
94	2523
130	2361
180	2218
245	2072
330	1923
435	1785
560	1644
710	1517
890	1402
1100	1300
1340	1208
1610	1121
1910	1039
2240	957

2. For the copper smelter located near Hayden, Arizona at latitude 33°0'29"N and longitude 110°47'17"W, annual average fugitive emissions calculated under R18-2-715.01(T) shall not exceed ~~582~~ 295 pounds per hour.

H. In addition to the limits in subsection (F)(3), except as provided in a consent decree or a delayed compliance order, the owner or operator of the copper smelter located near Miami, Arizona at latitude 33°24'50"N and longitude 110°51'25"W shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from combined stack and fugitive emissions units in excess of the 2420 pounds per hour annual average calculated under R18-2-715.01(U).

R18-2-715.01. Standards of Performance for Existing Primary Copper Smelters; Compliance and Monitoring

A. No change
B. No change
C. No change
D. No change
E. No change
F. No change
G. No change
H. No change
I. No change
J. No change
K. No change
L. No change
M. No change
N No change
O. No change
P. No change
Q. No change
R. No change
S. No change

T. The emission limit in R18-2-715(G)(2) applies to the total of uncaptured fugitive sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not emissions due solely to the use of fuel for space heating or steam generation. The owner or operator shall determine compliance with the emission limit contained in R18-2-715(G)(2) as follows:

1. The owner or operator shall calculate annual average fugitive emissions at the end of the last day of each month by averaging the monthly emissions for the previous 12-month period ending on that day. ~~As a means of determining~~ To determine monthly fugitive emissions, the owner or operator shall perform material balances for sulfur according to the sulfur balance procedures prescribed in Appendix 8 of this Chapter.
2. An annual emissions average in excess of the allowable annual average emission limit ~~is a violation of~~ violates R18-2-715(G)(2) if the fugitive annual average computed at the end of each month exceeds the allowable annual average emission limit.

U. The emission limit in R18-2-715(H) applies to the total of stack and uncaptured fugitive sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not emissions due solely to the use of fuel for space heating or steam generation. The owner or operator shall determine compliance with the emission limit contained in R18-2-715(H) as follows:

1. The owner or operator shall calculate annual average stack emissions at the end of the last day of each month by averaging the emissions for all hours measured during the previous 12-month period ending on that day according to the requirements contained in subsection (K).
2. The owner or operator shall calculate annual average fugitive emissions at the end of the last day of each month by averaging the monthly emissions for the previous 12-month period ending on that day. ~~As a means of determining~~ To determine monthly fugitive emissions, the owner or operator shall perform material balances for sulfur according to the sulfur balance procedures prescribed in Appendix 8 of this Chapter.
3. An annual emissions average in excess of the allowable annual average emission limit ~~is a violation of~~ violates R18-2-715(H) if the total of the stack and fugitive annual averages computed at the end of each month exceeds the allowable annual average emission limit.

11. A summary of the principal comments and the agency response to them:

ADEQ received one comment letter from ASARCO Inc. on the proposed rule.

Comment 1: The limits proposed in the rule were based on an air quality impact analysis that used recent calculated emission levels for the smelter. Since the time of the proposed rule, ASARCO completed a more detailed analysis of the methods of calculating certain emissions for the facility than the analysis used to calculate emission limits in the proposed rule. The original analysis did not reflect the process modifications completed since 1998. ASARCO has found that due to process modifications at the smelter, a portion of the smelter's emissions were overestimated in the original assessment. The company requested specific lower emission limits in R18-2-715(F)(2) and in R18-2-715(G)(2) to reflect the updated analysis.

Response 1: ADEQ has reviewed the information provided by the company and agrees that because of process modifications and improvements to emission controls at the smelter an update of the calculation method and subsequent emission limits is necessary. ADEQ has, therefore, included the requested reduced emission limits in R18-2-715(F)(2) and R18-2-715(G)(2).

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

Not applicable

13. Incorporations by reference and their location in the rules:

None

14. Were the rules previously adopted as emergency rules?

No

15. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 2. DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

Section
R18-2-715. Standards of Performance for Existing Primary Copper Smelters; Site-specific Requirements
R18-2-715.01. Standards of Performance for Existing Primary Copper Smelters; Compliance and Monitoring

ARTICLE 7. EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS

R18-2-715. Standards of Performance for Existing Primary Copper Smelters; Site-specific Requirements

A. No change
B. No change
C. No change
1. No change
   a. No change
   b. No change
2. No change

D. No change
E. No change
1. No change
2. No change

F. Except as provided in a consent decree or a delayed compliance order, the owner or operator of any primary copper smelter shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from any stack required to be monitored by R18-2-715.01(K) in excess of the following:
1. For the copper smelter located near San Manuel, Arizona at latitude 32°36’58”N and longitude 110°37’19”W:
   a. Annual average emissions, as calculated under R18-2-715.01(C), shall not exceed 1,742 pounds per hour.
   b. The number of three-hour average emissions, as calculated under R18-2-715.01(C), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)
0	9803
1	8253
2	7619
4	6072
7	5660
12	4922
20	4515
32	4272

48	3945
68	3727
94	3568
130	3419
180	3253
245	3101
330	2958
435	2831
560	2712
710	2615
890	2525
1100	2440
1340	2366
1610	2290
1910	2216
2240	2142

2. For the copper smelter ~~of ASARCO Inc., Hayden~~ located near Hayden, Arizona at latitude 33°0'29"N and longitude 110°47'17" W:

   a. Annual average emissions, as calculated ~~pursuant to~~ under R18-2-715.01(C) ~~through (J)~~, shall not exceed ~~9,521~~ 6,882 pounds per hour.

   b. The number of three-hour average emissions, as calculated ~~pursuant to~~ under R18-2-715.01(C) ~~through (J)~~, shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)	
0	~~38,000~~	24,641
1	~~36,000~~	22,971
2	~~34,000~~	21,705
4	~~32,000~~	20,322
7	~~30,500~~	19,387
12	~~28,800~~	18,739
20	~~27,300~~	17,656
32	~~26,000~~	16,988
48	~~25,000~~	16,358
68	~~23,800~~	15,808
94	~~22,700~~	15,090
130	~~21,500~~	14,423
180	~~20,500~~	13,777
245	~~19,300~~	13,212
330	~~18,500~~	12,664
435	~~17,500~~	12,129
560	~~16,700~~	11,621
710	~~16,000~~	11,165
890	~~15,000~~	10,660
1100	~~14,200~~	10,205
1340	~~13,500~~	9,748
1610	~~12,800~~	9,319

1910	~~12,200~~	8,953
2240	~~11,500~~	8,556

~~3. For the copper smelter of ASARCO, Inc., Ray Mines Division:~~

~~a. Annual average emissions, as calculated pursuant to R18-2-715.01(C) through (J), shall not exceed 7,790 pounds per hour.~~

~~b. The number of three-hour average emissions, as calculated pursuant to R18-2-715.01(C) through (J), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period:~~

~~n~~	~~E, (lb/hr)~~
~~0~~	~~34,000~~
~~1~~	~~32,000~~
~~2~~	~~30,000~~
~~4~~	~~28,500~~
~~7~~	~~26,800~~
~~12~~	~~25,300~~
~~20~~	~~24,000~~
~~32~~	~~22,800~~
~~48~~	~~21,700~~
~~68~~	~~20,700~~
~~94~~	~~19,700~~
~~130~~	~~18,700~~
~~180~~	~~17,700~~
~~245~~	~~16,700~~
~~330~~	~~15,700~~
~~435~~	~~15,200~~
~~560~~	~~14,400~~
~~710~~	~~13,500~~
~~890~~	~~12,700~~
~~1100~~	~~12,000~~
~~1340~~	~~11,200~~
~~1610~~	~~10,500~~
~~1910~~	~~10,000~~
~~2240~~	~~9,500~~

~~4.~~3. For the copper smelter ~~of Cyprus Miami Mining Corporation, Miami~~ located near Miami, Arizona at latitude 33°24’50”N and longitude 110°51’25”W:

a. Annual average emissions, as calculated ~~pursuant to~~ under R18-2-715.01(C) ~~through (J)~~, shall not exceed ~~3,163~~ 604 pounds per hour.

b. The number of ~~3-hour~~ three-hour average emissions, as calculated ~~pursuant to~~ under R18-2-715.01(C) ~~through (J)~~, shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01(J):

n, Cumulative Occurrences	E, (lb/hr)	
0	~~16,900~~	8678
1	~~15,800~~	7158
2	~~14,750~~	5903
4	~~13,900~~	4575

7	~~13,100~~	4074
12	~~12,250~~	3479
20	~~11,500~~	3017
32	~~10,800~~	2573
48	~~10,250~~	2111
68	~~9,750~~	1703
94	~~9,250~~	1461
130	~~8,700~~	1274
180	~~8,200~~	1145
245	~~7,600~~	1064
330	~~7,200~~	1015
435	~~6,750~~	968
560	~~6,300~~	933
710	~~5,800~~	896
890	~~5,500~~	862
1100	~~5,200~~	828
1340	~~4,800~~	797
1610	~~4,500~~	765
1910	~~4,100~~	739
2240	~~3,800~~	712

~~5. For the copper smelter of Phelps Dodge Corporation, New Cornelia Branch:~~

~~a. Annual average emissions, as calculated pursuant to R18-2-715.01(C) through (J), shall not exceed 8,900 pounds per hour.~~

~~b. The number of three-hour average emissions, as calculated pursuant to R18-2-715.01(C) through (J), shall not exceed n cumulative occurrences in excess of E, the emission level, shown in the following table in any compliance period:~~

~~n~~	~~E, (lb/hr)~~
~~0~~	~~37,000~~
~~1~~	~~35,000~~
~~2~~	~~32,500~~
~~4~~	~~31,000~~
~~7~~	~~29,000~~
~~12~~	~~27,500~~
~~20~~	~~26,000~~
~~32~~	~~25,000~~
~~48~~	~~23,500~~
~~68~~	~~22,500~~
~~94~~	~~21,500~~
~~130~~	~~20,500~~
~~180~~	~~19,500~~
~~245~~	~~18,500~~
~~330~~	~~17,500~~
~~435~~	~~17,000~~
~~560~~	~~16,000~~
~~710~~	~~15,000~~
~~890~~	~~14,250~~
~~1100~~	~~13,500~~
~~1340~~	~~12,500~~

~~1610~~	~~12,000~~
~~1910~~	~~11,000~~
~~2240~~	~~10,500~~

~~6. For the copper smelter of Phelps Dodge Corporation, Morenci Branch:~~

~~a. Annual average emissions, as calculated pursuant to R18-2-715.01(C) through (J), shall not exceed 10,505 pounds per hour.~~

~~b. The number of 3-hour average emissions, as calculated pursuant to R18-2-715.01(C) through (J), shall not exceed n cumulative occurrences in excess of E, the emissions level, shown in the following table in any compliance period:~~

~~n~~	~~E, (lb/hr)~~
~~0~~	~~43,500~~
~~1~~	~~41,000~~
~~2~~	~~38,200~~
~~4~~	~~36,200~~
~~7~~	~~34,500~~
~~12~~	~~32,500~~
~~20~~	~~30,500~~
~~32~~	~~29,500~~
~~48~~	~~28,000~~
~~68~~	~~27,000~~
~~94~~	~~26,000~~
~~130~~	~~24,500~~
~~180~~	~~23,000~~
~~245~~	~~22,000~~
~~330~~	~~21,000~~
~~435~~	~~19,500~~
~~560~~	~~18,500~~
~~710~~	~~17,500~~
~~890~~	~~16,500~~
~~1100~~	~~15,500~~
~~1340~~	~~15,000~~
~~1610~~	~~14,000~~
~~1910~~	~~13,000~~
~~2240~~	~~12,000~~

G. Except as provided in a consent decree or a delayed compliance order, the owner or operator of the copper ~~smelter located near San Manuel, Arizona at latitude 32°36'58"N and longitude 110°37'19"W~~ smelters listed below shall not discharge or cause the discharge of fugitive sulfur dioxide into the atmosphere in excess of the following:

1. For the copper smelter located near San Manuel, Arizona at latitude 32°36'58"N and longitude 110°37'19"W:

~~1.~~ a. Annual average emissions calculated under R18-2-715.01(R) shall not exceed 715 pounds per hour for converter roof fugitive emissions; and

~~2.~~ b. The number of three-hour average emissions for converter roof fugitive emissions, calculated under R18-2-715.01(R) shall not exceed n cumulative occurrences in excess of E_f, the emission level, shown in the following table in any compliance period as defined in R18-2-715.01~~(J)~~(R)(8):

n, Cumulative Occurrences	E_f, (lb/hr)
0	4462
1	4299
2	4222
4	4017
7	3867
12	3460
20	3179
32	3000
48	2827
68	2649
94	2523
130	2361
180	2218
245	2072
330	1923
435	1785
560	1644
710	1517
890	1402
1100	1300
1340	1208
1610	1121
1910	1039
2240	957

2. For the copper smelter located near Hayden, Arizona at latitude 33°0'29"N and longitude 110°47'17"W, annual average fugitive emissions calculated under R18-2-715.01(T) shall not exceed 295 pounds per hour.

H. In addition to the limits in subsection (F)(3), except as provided in a consent decree or a delayed compliance order, the owner or operator of the copper smelter located near Miami, Arizona at latitude 33°24'50"N and longitude 110°51'25"W shall not discharge or cause the discharge of sulfur dioxide into the atmosphere from combined stack and fugitive emissions units in excess of the 2420 pounds per hour annual average calculated under R18-2-715.01(U).

R18-2-715.01. Standards of Performance for Existing Primary Copper Smelters; Compliance and Monitoring

A. The cumulative occurrence and emission limits in R18-2-715(F) apply to the total of sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not uncaptured fugitive emissions ~~and~~ or emissions due solely to the use of fuel for space heating or steam generation.

B. The owner or operator shall include periods of malfunction, startup, shutdown or other upset conditions when determining compliance with the cumulative occurrence or annual average emission limits in R18-2-715(F), ~~or~~ (G), or (H).

C. The owner or operator shall determine compliance with the cumulative occurrence and emission limits contained in R18-2-715(F) as follows:

1. The owner or operator shall calculate annual average emissions at the end of each day by averaging the emissions for all hours measured during the compliance period defined in subsection (J) ending on that day. An annual emissions average in excess of the allowable annual average emission limit is a violation of R18-2-715(F) if either:
   a. The annual average is greater than the annual average computed for the preceding day; or
   b. The annual averages computed for the five preceding days all exceed the allowable annual average emission limit~~; and~~.
2. The owner or operator shall calculate a three-hour emissions average at the end of each clock hour by averaging the hourly emissions for the preceding three consecutive hours provided each hour was measured according to the requirements in subsection (K).

D. For purposes of this Section, the compliance date, unless otherwise provided in a consent decree or a delayed compliance order, shall be January 14, 1986, except that:
1. ~~the~~ The compliance date for the cumulative occurrence and emissions limits in R18-2-715(F)(1) and R18-2-715(G)(1) ~~and (2)~~ is January 15, 2002~~.~~, and
2. The compliance date for the cumulative occurrence and emissions limits in R18-2-715(F)(2), (F)(3), (G)(2), and (H) is the effective date of this rule.

E. For purposes of subsection (C), a three-hour emissions average in excess of an emission level E violates the associated cumulative occurrence limit n listed in R18-2-715(F) if:
1. The number of all three-hour emissions averages calculated during the compliance period in excess of that emission level exceeds the cumulative occurrence limit associated with the emission level; and
2. The average is calculated during the last operating day of the compliance period being reported.

F. A three-hour emissions average only violates the cumulative occurrence limit n of an emission level E on the day containing the last hour in the average.

G. Multiple violations of the same cumulative occurrence limit on the same day and violations of different cumulative occurrence limits on the same day constitute a single violation of R18-2-715(F).

H. The violation of any cumulative occurrence limit and an annual average emission limit on the same day constitutes only a single violation of the requirements of R18-2-715(F).

I. Multiple violations of a cumulative occurrence limit by different three-hour emissions averages containing any common hour constitutes a single violation of R18-2-715(F).

J. To determine compliance with subsections (C) through (I), the compliance period consists of the 365 calendar days immediately preceding the end of each day of the month being reported unless that period includes less than 300 operating days, in which case the number of days preceding the last day of the compliance period shall be increased until the compliance period contains 300 operating days. For purposes of this Section, an operating day is any day on which sulfur-containing feed is introduced into the smelting process.

K. To determine compliance with R18-2-715(F) or (H), the owner or operator of any smelter subject to R18-2-715(F) or (H) shall install, calibrate, maintain, and operate a measurement system for continuously monitoring sulfur dioxide concentrations and stack gas volumetric flow rates in each stack that could emit five percent or more of the allowable annual average sulfur dioxide emissions from the smelter.
1. The owner or operator shall continuously monitor sulfur dioxide concentrations and stack gas volumetric flow rates in the outlet of each piece of sulfur dioxide control equipment.
2. The owner or operator shall continuously monitor captured fugitive emissions for sulfur dioxide concentrations and stack gas volumetric flow rates and include these emissions as part of total plant emissions when determining compliance with the cumulative occurrence and emission limits in R18-2-715(F) and (H).
3. If the owner or operator demonstrates to the Director that measurement of stack gas volumetric flow in the outlet of any particular piece of sulfur dioxide control equipment would yield inaccurate results once operational or would be technologically infeasible, then the Director may allow measurement of the flow rate at an alternative sampling point.
4. For purposes of this subsection, continuous monitoring means the taking and recording of at least one measurement of sulfur dioxide concentration and stack gas flow rate reading from the effluent of each affected stack, outlet, or other approved measurement location in each 15-minute period. Fifteen-minute periods start at the beginning of each clock hour, and run consecutively. An hour of smelter emissions is considered continuously monitored if the emissions from all monitored stacks, outlets, or other approved measurement locations are measured for at least 45 minutes of any hour according to the requirements of this subsection.
5. The owner or operator shall demonstrate that the continuous monitoring system meets all of the following requirements:
   a. The sulfur dioxide continuous emission monitoring system installed and operated under this Section meets the requirements of 40 CFR 60, Appendix B, Performance Specification 6.
   b. The sulfur dioxide continuous emission monitoring system installed and operated under this Section meets the quality assurance requirements of 40 CFR 60, Appendix F.
   c. The owner or operator shall notify the Director in writing at least 30 days in advance of the start of ~~quality assurance~~ relative accuracy test audit (RATA) procedures performed on the continuous monitoring system.
   d. The Director shall approve the location of all sampling points for monitoring sulfur dioxide concentrations and stack gas volumetric flow rates in writing before installation and operation of measurement instruments.
   e. The measurement system installed and used under this subsection is subject to the manufacturer's recommended zero adjustment and calibration procedures at least once per 24-hour operating period unless the manufacturer specifies or recommends calibration at shorter intervals, in which case specifications or recommendations shall be followed. The owner or operator shall make available a record of these procedures that clearly shows instrument readings before and after zero adjustment and calibration.

L. The owner or operator of a smelter subject to this Section shall measure at least 95 percent of the hours during which emissions occurred in any month.

M. ~~The~~ Failure of the owner or operator of a smelter subject to this Section ~~shall~~ to measure any 12 consecutive hours of emissions according to the requirements of subsection (K) or (S) is a violation of this Section.

N. The owner or operator of any smelter subject to this Section shall maintain on hand and ready for immediate installation sufficient spare parts or duplicate systems for the continuous monitoring equipment required by this Section to allow for the replacement within six hours of any monitoring equipment part that fails or malfunctions during operation.

O. To determine total overall emissions, the owner or operator of any smelter subject to this Section shall perform material balances for sulfur according to the procedures prescribed by Appendix 8 of this Chapter.

P. The owner or operator of any smelter subject to this Section shall maintain a record of all average hourly emissions measurements and all calculated average monthly emissions required by this Section. The record of the emissions shall be retained for at least five years following the date of measurement or calculation. The owner or operator shall record the measurement or calculation results as pounds per hour of sulfur dioxide. The owner or operator shall summarize the following data monthly and submit ~~them~~ the summary to the Director within 20 days after the end of each month:

1. For all periods described in subsection (C) and (R), the annual average emissions as calculated at the end of each day of the month;
2. The total number of hourly periods during the month in which measurements were not taken and the reason for loss of measurement for each period;
3. The number of three-hour emissions averages that exceeded each of the applicable emissions levels listed in R18-2-715(F) and (G)(1)(b) for the compliance periods ending on each day of the month being reported;
4. The date on which a cumulative occurrence limit listed in R18-2-715(F) or (G)(1)(b) was exceeded if the exceedance occurred during the month being reported~~.~~ ; and
5. For all periods described in subsection (T) and (U), the annual average emissions as calculated at the end of the last day of each month.

Q. An owner or operator shall install instrumentation to monitor each point in the smelter facility where a means exists to bypass the sulfur removal equipment, to detect and record all periods that the bypass is in operation. An owner or operator of a copper smelter shall report to the Director, not later than the 15th day of each month, the recorded information required by this Section, including an explanation for the necessity of the use of the bypass.

R. The owner or operator shall determine compliance with the cumulative occurrence and fugitive emission limits contained in R18-2-715(G)(1) ~~and (2)~~ as follows:

1. The owner or operator shall calculate annual average emissions at the end of each day by averaging the emissions for all hours measured during the compliance period, as defined in subsection (R)(8), ending on that day. An annual emissions average in excess of the allowable annual average emission limit is a violation of R18-2-715(G)(1)(a) if either:
   a. The annual average is greater than the annual average computed for the preceding day; or
   b. The annual averages computed for the five preceding days all exceed the allowable annual average emission limit.
2. The owner or operator shall calculate a three-hour emissions average at the end of each clock hour by averaging the hourly emissions for the preceding three consecutive hours provided each hour was measured according to the requirements contained in subsection (S).
3. For purposes of subsection (R)(2), a three-hour emissions average in excess of an emission level E_f violates the associated cumulative occurrence limit n listed in R18-2-715(G)~~(2)~~(1)(b) if:
   a. The number of all three-hour emissions averages calculated during the compliance period in excess of that emission level exceeds the cumulative occurrence limit associated with the emission level; and
   b. The average is calculated during the last operating day of the compliance period being reported.
4. A three-hour emissions average only violates the cumulative occurrence limit n of an emission level E_f on the day containing the last hour in the average.
5. Multiple violations of the same cumulative occurrence limit on the same day and violations of different cumulative occurrence limits on the same day constitute a single violation of R18-2-715(G)~~(2)~~(1)(b).
6. The violation of any cumulative occurrence limit and an annual average emission limit on the same day constitutes only a single violation of the requirements of R18-2-715(G)(1).
7. Multiple violations of a cumulative occurrence limit by different three-hour emissions averages containing any common hour constitutes a single violation of R18-2-715(G)~~(2)~~(1)(b).
8. To determine compliance with subsections (R)(1) through (7), the compliance period consists of the 365 calendar days immediately preceding the end of each day of the month being reported unless that period includes less than 300 operating days, in which case the number of days preceding the last day of the compliance period shall be increased until the compliance period contains 300 operating days. For purposes of this Section, an operating day is any day on which sulfur-containing feed is introduced into the smelting process.

S. To determine compliance with R18-2-715(G)(1) ~~and (2)~~, the owner or operator of ~~any~~ the smelter subject to R18-2-715(G)(1) ~~and (2)~~ shall install, calibrate, maintain, and operate a measurement system for continuously monitoring sulfur dioxide concentrations of the converter roof fugitive emissions.

1. For purposes of this subsection, continuous monitoring means the taking and recording of at least one measurement of sulfur dioxide concentration from an approved measurement location in each 15-minute period. Fifteen-minute periods start at the beginning of each clock hour, and run consecutively. An hour of smelter emissions is considered continuously monitored if the emissions from all approved measurement locations are measured for at least 45 minutes of any hour according to the requirements of this subsection.
2. The owner or operator of a smelter subject to the requirements of this subsection shall conduct quality assurance procedures on the continuous monitoring system according to the methods in 40 CFR 60, Appendix F, except that an annual relative accuracy test audit (RATA) is not required.

T. The emission limit in R18-2-715(G)(2) applies to the total of uncaptured fugitive sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not emissions due solely to the use of fuel for space heating or steam generation. The owner or operator shall determine compliance with the emission limit contained in R18-2-715(G)(2) as follows:

1. The owner or operator shall calculate annual average fugitive emissions at the end of the last day of each month by averaging the monthly emissions for the previous 12-month period ending on that day. To determine monthly fugitive emissions, the owner or operator shall perform material balances for sulfur according to the sulfur balance procedures prescribed in Appendix 8 of this Chapter.
2. An annual emissions average in excess of the allowable annual average emission limit violates R18-2-715(G)(2) if the fugitive annual average computed at the end of each month exceeds the allowable annual average emission limit.

U. The emission limit in R18-2-715(H) applies to the total of stack and uncaptured fugitive sulfur dioxide emissions from the smelter processing units and sulfur dioxide control and removal equipment, but not emissions due solely to the use of fuel for space heating or steam generation. The owner or operator shall determine compliance with the emission limit contained in R18-2-715(H) as follows:

1. The owner or operator shall calculate annual average stack emissions at the end of the last day of each month by averaging the emissions for all hours measured during the previous 12-month period ending on that day according to the requirements contained in subsection (K).
2. The owner or operator shall calculate annual average fugitive emissions at the end of the last day of each month by averaging the monthly emissions for the previous 12-month period ending on that day. To determine monthly fugitive emissions, the owner or operator shall perform material balances for sulfur according to the sulfur balance procedures prescribed in Appendix 8 of this Chapter.
3. An annual emissions average in excess of the allowable annual average emission limit violates R18-2-715(H) if the total of the stack and fugitive annual averages computed at the end of each month exceeds the allowable annual average emission limit.

NOTICE OF FINAL RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 11. DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY STANDARDS

PREAMBLE

1. Sections Affected — **Rulemaking Action**

Article 6	New Article
R18-11-601	New Section
R18-11-602	New Section
R18-11-603	New Section
R18-11-604	New Section
R18-11-605	New Section
R18-11-606	New Section

2. The specific authority for the rulemaking, including both the authorizing statute (general) and the statutes the rules are implementing (specific):

Authorizing statutes: A.R.S. §§ 49-232(C), 49-233(C), and 49-235

Implementing statutes: A.R.S. §§ 49-232 and 49-233

3. The effective date of the rules:

July 12, 2002

4. A list of all previous notices appearing in the Register addressing the proposed rule:

Notice of Rulemaking Docket Opening: 7 A.A.R. 5727, December 21, 2001

Notice of Proposed Rulemaking: 8 A.A.R. 524, February 8, 2002

5. The name and address of agency personnel with whom persons may communicate regarding the rulemaking:

Name: Shirley J. Conard

Address: Arizona Department of Environmental Quality
3033 N. Central Avenue, M0401A-422
Phoenix, AZ 85012-2809

Telephone: (602) 207-4632 (Metro-Phoenix area) or
(800) 234-5677, 4416 (other areas)

Fax: (602) 207-4674

E-mail: conard.shirley@ev.state.az.us

6. An explanation of the rule, including the agency's reasons for initiating the rule:

This rulemaking establishes a new Article dealing with the process and methodology required under A.R.S. § 49-232(C) for identifying impaired surface waters. The rulemaking establishes appropriate criteria for data quality assurance and quality control, a process to add or remove waters to or from the list of impaired waters, and public participation procedures. The rules also specify the factors required under A.R.S. § 49-233(C) for prioritizing impaired surface waters that require development of total maximum daily loads.

Background

The water quality of the nation's surface waters is improving in many areas, but some surface waters still do not fully meet standards developed to protect fish, drinking water, and other designated uses. Over the past 30 years, major improvements throughout the United States have been made in controlling direct discharges from industrial and municipal wastewater treatment facilities. Now, the primary problem confronting our waters is polluted runoff from a variety of daily activities. This type of pollution comes from diverse sources, such as stormwater from urban areas, sediments from new construction or improper land clearing, fertilizers and pesticides from lawns and agriculture, and increased stream temperature from habitat destruction.

The Clean Water Act requires states to adopt standards for the protection of surface water quality. These standards are designed to maintain water quality that will support the designated uses assigned to a surface water. Designated uses include: domestic water source; aquatic life support for fish and waterfowl; bathing, swimming, and recreational

uses; fish consumption, agricultural irrigation, and livestock watering. While there may be several designated uses assigned to a river, stream, or lake, the Clean Water Act requires the Department to protect the *most sensitive* designated uses assigned to the surfaced water.

The water quality standards employed to maintain these designated uses and protect human health, aquatic life, and wildlife, include numeric criteria for parameters, such as bacteria, pH, turbidity, dissolved oxygen, temperature, and certain toxic or carcinogenic compounds, and narrative criteria for parameters, such as the growth of aquatic weeds or algae, toxicity, color, sediment deposits, and antidegradation.

Changes in water quality conditions may result from either point source or nonpoint source discharges. Point source discharges have an identifiable surface water entry point, such as a wastewater treatment plant discharge pipe, well, or canal. Nonpoint sources contribute pollutants to waters over an extended area, generally in a diffuse manner. Point source discharges are regulated by the federal National Pollutant Discharge Elimination System (NPDES) program, which is the surface water discharge permitting program described in section 402 of the Clean Water Act. (Arizona anticipates that by July 2002, it will have EPA approval to implement the federal NPDES program.) Timber harvesting and agricultural operations, such as grazing are examples of activities often related to nonpoint sources of pollution. Nonpoint sources are addressed through the use of voluntary Best Management Practices (BMPs) designed to reduce the water quality impacts of land use activities. Discharge permits and nonpoint source BMPs are the primary means for maintaining or restoring water quality.

The Clean Water Act Requirements

The Clean Water Act was established to restore and maintain the chemical, physical, and biological integrity of the nation's waters to, wherever attainable, provide for the protection and propagation of fish, shellfish, and wildlife; for recreation in and on the nation's waters; and for the development and implementation of programs to control nonpoint sources of pollution. This is commonly referred to as the "fishable, swimmable" goal of the Clean Water Act.

Section 305(b) of the Clean Water Act requires states to prepare and submit to EPA a biennial report that describes the water quality of all surface waters in the state. Each state must monitor water quality and review available data and information from various sources to determine if water quality standards are being met. From this 305(b) Report and other sources of information, the 303(d) List is created. This list identifies those streams that do not meet one or more of its designated uses. These waters are known as "water quality limited segments" or "impaired waters." Identifying a surface water as impaired may be based on an evaluation of physical, chemical, or biological data demonstrating evidence of a numeric standard exceedance, a narrative standard exceedance, designated use impairment, or on a declining trend in water quality, such that the surface water would exceed a water quality standard before the next listing period (antidegradation provisions under 40 CFR 130.7(b)(3)).

Section 303(d) of the Clean Water Act requires each state to prepares several lists of surface water segments not meeting surface water quality standards, including those that are not expected to meet state surface water quality standards after implementation of technology-based controls. The draft list is revised based on public input and finalized for submission to EPA. Arizona, like most states, prepares one list containing all of the waters meeting the criteria in section 303(d). At a minimum, the following sources of data are considered:

- Surface waters identified in the 305(b) Report, including the section 314 lakes assessment, as not meeting water quality standards;
- Surface waters for which dilution calculations or predictive models indicate nonattainment of standards;
- Surface waters for which problems have been reported by other agencies, institutions, and the public;
- Surface waters identified as impaired or threatened in the state's nonpoint assessments submitted to EPA under section 319 of the Clean Water Act;
- Fish consumption advisories and restrictions on water sports and recreational contact;
- Reports of fish kills or abnormalities (cancers, lesions, tumors);
- Water quality management plans;
- The Safe Drinking Water Act section 1453 source water assessments; and
- Superfund and Resource Conservation and Recovery Act (RCRA) reports and the Toxic Release Inventory.

When the 303(d) List and supporting documentation are submitted to EPA for review and approval, the submission constitutes the bulk of the administrative record supporting EPA's approval of the list. The submission contains the 303(d) List, including the pollutants or suspected pollutants impairing water quality; the priorities and the surface waters targeted for TMDL development during the next listing cycle; a description of the process used to develop the 303(d) List; the basis for listing decisions, including reasons for not including a surface water or segment on the list; and a summary of the response to public comments. Where there are exceedances of standards, 40 CFR 130.7(b)(6)(iv) requires a state to demonstrate "good cause" for not listing a surface water and places the burden of

proof on the state to justify excluding a surface water from the list. "Good cause" factors include more recent or accurate data, flaws in the original analysis, more sophisticated water quality modeling, or changes in the conditions that demonstrate that the surface water is no longer impaired.

40 CFR 130.7(c)(1) and A.R.S. § 49-233 require the state to prioritize the identified impaired waters for development of a total maximum daily load (TMDL) for each pollutant. A TMDL is a scientific determination of the maximum amount, or "load," of the specific pollutant that a river, lake, or other surface water can tolerate or assimilate without exceeding surface water quality standards. Once a TMDL is established, that "load" is then allocated between the various identified point and nonpoint sources of that pollutant in the watershed and is implemented through permitting actions, such as NPDES permits, or through non-regulatory or voluntary efforts for nonpoint source activities.

EPA Guidance on Monitoring, Assessment and Listing Decisions

The 305(b) Report and the 303(d) List are highly visible ways that EPA communicates the health of the nation's waters. On November 19, 2001, EPA published the *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* to assist states in developing these documents in an effort to improve the quality, reliability, and consistency of the reporting. The guidance recommends that states move toward an integrated report that will satisfy both sections 305(b) and 303(d) of the Clean Water Act and provide the following information:

- Delineation of water quality assessment units based on the National Hydrography Dataset,
- Status of and progress toward achieving comprehensive assessments of all waters,
- The water quality standard attainment status for each assessment unit and the basis for the decision,
- Additional monitoring necessary to determine status or to develop TMDLs for each pollutant causing impairment,
- Monitoring schedules for further assessments or TMDL development,
- Pollutants and/or surface waters still requiring TMDLs, and
- TMDL development schedules based on priority ranking.

EPA believes that an integrated report will enhance the ability for states to display, access, and integrate data from all components of the water quality program as well as other media programs. The integrated report will benefit the public by providing a clearer summary of the water quality status and the ability to track waters as they move into different categories based on attainment status, level of available data, progression of monitoring schedules, and development and implementation of a TMDL. EPA's guidance recommends that states develop a five-part list that categorize surface waters as follows:

Part 1: Surface waters that are attaining water quality standards and no uses are threatened;

Part 2: Surface waters that are attaining some of the designated uses, no use is threatened, and insufficient or no data are available to determine if the remaining uses are attained or threatened;

Part 3: Surface waters where insufficient or no data and information to determine if any designated use is attained;

Part 4: Surface waters that are impaired or threatened for one or more designated uses but does not require the development of a TMDL because:

a. A TMDL has been completed,

b. Other pollution control requirements are reasonably expected to result in the attainment of the water quality standard in the near future, or

c. The impairment is caused by pollution but not a pollutant.

Part 5: Surface water that is impaired or threatened for one or more designated uses by a pollutant, and requires a TMDL.

EPA's guidance recommends that states should categorize surface waters that are impaired due to pollution, separately from surface waters that are impaired due to pollutant loadings. The definition of pollution in the Clean Water Act is very broad and covers "the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water." Pollutant, then, is a subset of pollution for which a load allocation can be developed. Pollution would, therefore, constitute alterations that do not involve the introduction of a measurable pollutant. Previous EPA guidance suggested that habitat and flow alterations would be examples of impairment under the pollution category.

EPA recognizes that not all states can immediately switch to an integrated approach but encourages states to implement those portions of the guidance they can this listing cycle and strive for complete integration by the next assess-

ment and listing cycle. Arizona has incorporated key concepts of the guidance into this rulemaking in the form of a two-part list:

List 1: The Planning List will contain those surface waters that, for example, do not meet the test of impairment, do not meet the credible data requirements where a TMDL has been developed and is being implemented, or where regulatory or statutory issues preclude placement on the 303(d) List. Surface waters in categories 2, 3, and 4 of EPA's guidance will be included on Arizona's Planning List.

List 2: The 303(d) List will contain only those waters determined impaired, according to the requirements of this rulemaking, for a pollutant and for which a TMDL must be developed.

"Threatened" waters are a special subset of waters that, by definition, are currently attaining all designated uses but are predicted to be impaired in the future. Waters are generally determined to be threatened through trend analysis, use of dilution calculations, or other predictive models that indicate impairment under a given set of circumstances. Current federal law and regulations are ambiguous regarding to threatened waters. 40 CFR 130.7((b)(5)(ii)) requires that states assemble and evaluate all existing and readily available data, including "waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards," but section 303(d) of the Clean Water Act is silent on these threatened waters. The *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* indicate that these threatened waters be included on the 303(d) List, but as noted above, there is no clear statutory or regulatory authority. The final July, 2000 TMDL rule (now suspended) did not require states to list threatened waters. Given this uncertainty regarding the ultimate fate of threatened waters, this rulemaking provides for placing threatened waters on either the Planning List or the 303(d) List, depending on whether, at the time the Department submits its final list to EPA, federal rules required threatened waters to be listed.

Arizona's Current 303(d) List of Impaired Waters

The assessment of streams, lakes, and wetlands to identify "impaired" waters for inclusion on the 303(d) List is an important step in a process intended to ensure that all surface waters in the state have water quality adequate to support all of their designated uses.

The 303(d) List is compiled using all readily available, credible, and scientific data to assess water quality and determine which surface waters are impaired. The draft list is prepared and presented for public comment. After all public comments are reviewed and considered, the final 303(d) List is developed and the listed waters are prioritized for TMDL development.

Arizona's current 303(d) List was developed and approved by EPA in 1998. The 1998 303(d) List contains 102 surface waters that are impaired for a range of pollutants. These surface waters have been ranked from high to low for the development of TMDLs. The Department is aggressively pursing development of TMDLs for surface waters on the 1998 303(d) List. On March 31, 2000, EPA announced that states would not be required to submit a 303(d) List for 2000. On October 18, 2001, EPA published in the Federal Register, that it had revised the date for states to submit the 2002 list of impaired waters from April 1, 2002 to October 1, 2002. The date was revised to provide states the opportunity to incorporate some or all of the recommendations suggested by EPA in the *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*, published, November 2001.

Current Condition of Arizona's Surface Waters

The 303(d) List contains surface waters that are impaired due to a "pollutant." Under the Clean Water Act, *pollutant* means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into a surface water. EPA and the state consider certain water quality characteristics, especially those for which there are water quality standards, such as dissolved oxygen, pH, temperature, turbidity, and suspended sediment, as pollutants if they result or may result in a surface water not attaining a water quality standard. Based on the 1998 303(d) List and the year 2000 305(b) Report, Figures 1 and 2 below, show the pollutants commonly affecting Arizona's streams and lakes.

Figure 1. Pollutants Impacting Streams

(Miles of Streams Impacted)

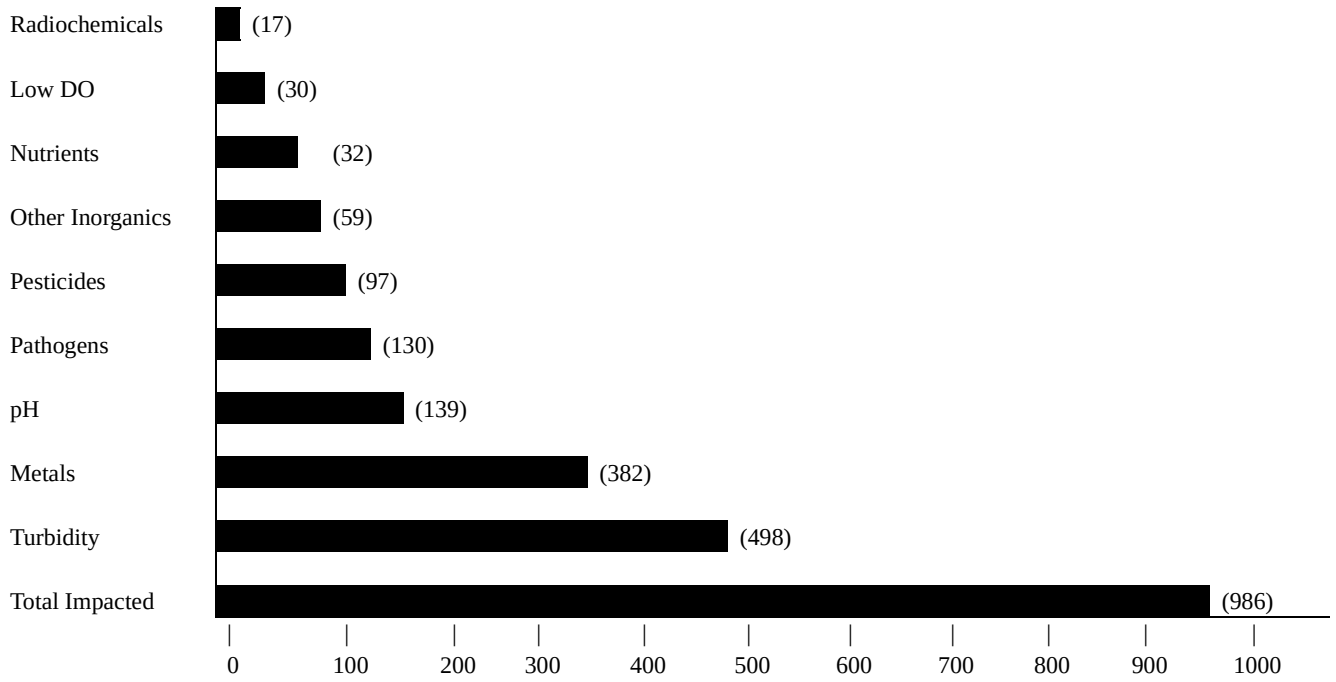
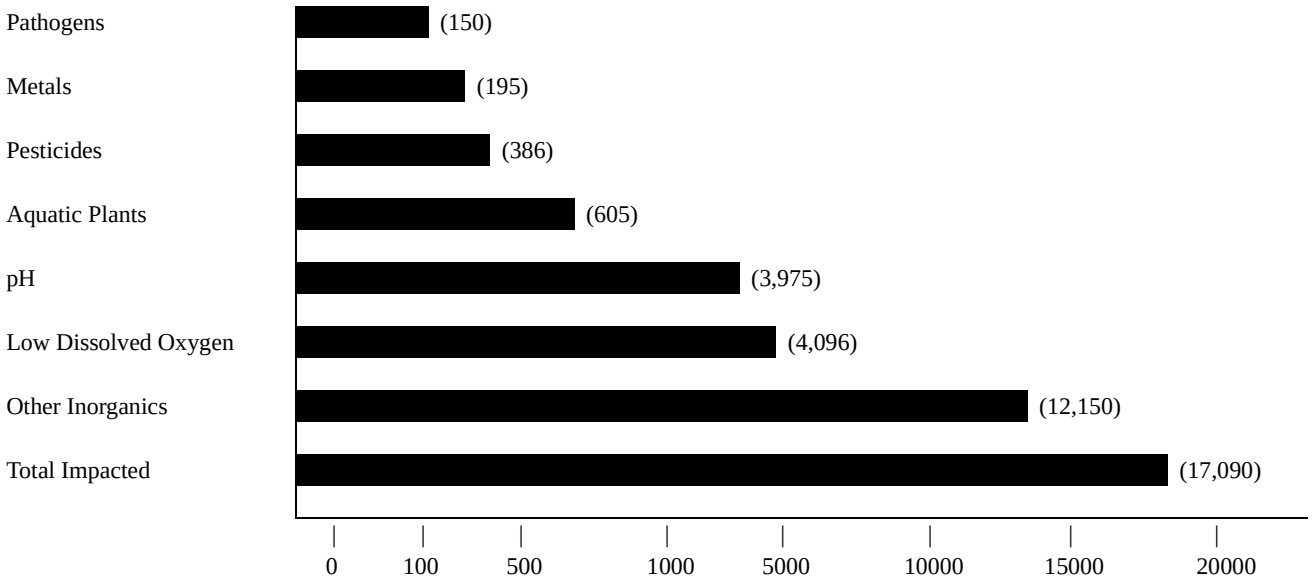


Figure 2. Pollutants Impacting Lakes

(Acres of Lakes Impacted)



Turbidity, which is a measure of the clarity of water, is the most common water quality characteristic causing impairment in Arizona's streams. Turbidity standards are developed to protect aquatic and wildlife designated uses because high turbidity may contribute to habitat degradation due to excessive sedimentation and algal blooms. Sources of sediment are varied, but can include erosion from road building, construction, forestry, grazing, and agriculture. Large quantities of sediment can be deposited in surface waters during seasonal runoff events. The Department has adopted, in its 2002 triennial review of the surface water quality standards, a new suspended sediment concentration (SSC) standard to replace the turbidity standard. The shift to an SSC standard is a recognition by the Department that large

sediment loads can be transported during high flow events, such as flash floods or monsoons in arid environment, but these loads do not necessarily impair the ecological system.

Many Arizona streams are impaired due to *metals*. Metals can leach from soil or mineralized rock in areas where they are exposed by road cuts, mining activities, or land development. Ore bodies can naturally contribute metals to streams and lakes through runoff after storm events and through groundwater recharge.

Low dissolved oxygen (DO), high pH, and algal blooms (noxious weeds), or a combination of these, often occurs in Arizona's shallow lakes. Low DO and high pH stress aquatic organisms and can contribute to fish kills. High densities of submerged and emergent aquatic vegetation can restrict recreational activities and, because algae consume oxygen in the water at night, sometimes cause fish kills.

Probable sources of pollutants impacting Arizona's streams and lakes that are not meeting their designated uses are shown in Figures 3 and 4. Often more than one pollutant impacts a surface water or the impact is due to pollution. The Department attempts to identify probable sources, as part of the 303(d) listing process, but accurate identification generally requires special investigation or a TMDL analysis. Each 305(b) Report shows potential sources of pollutants based on best available information, knowledge of land uses, geology, and best professional judgement.

Figure 3. Probable Pollutant Sources in Streams

(Miles of Streams Impacted)

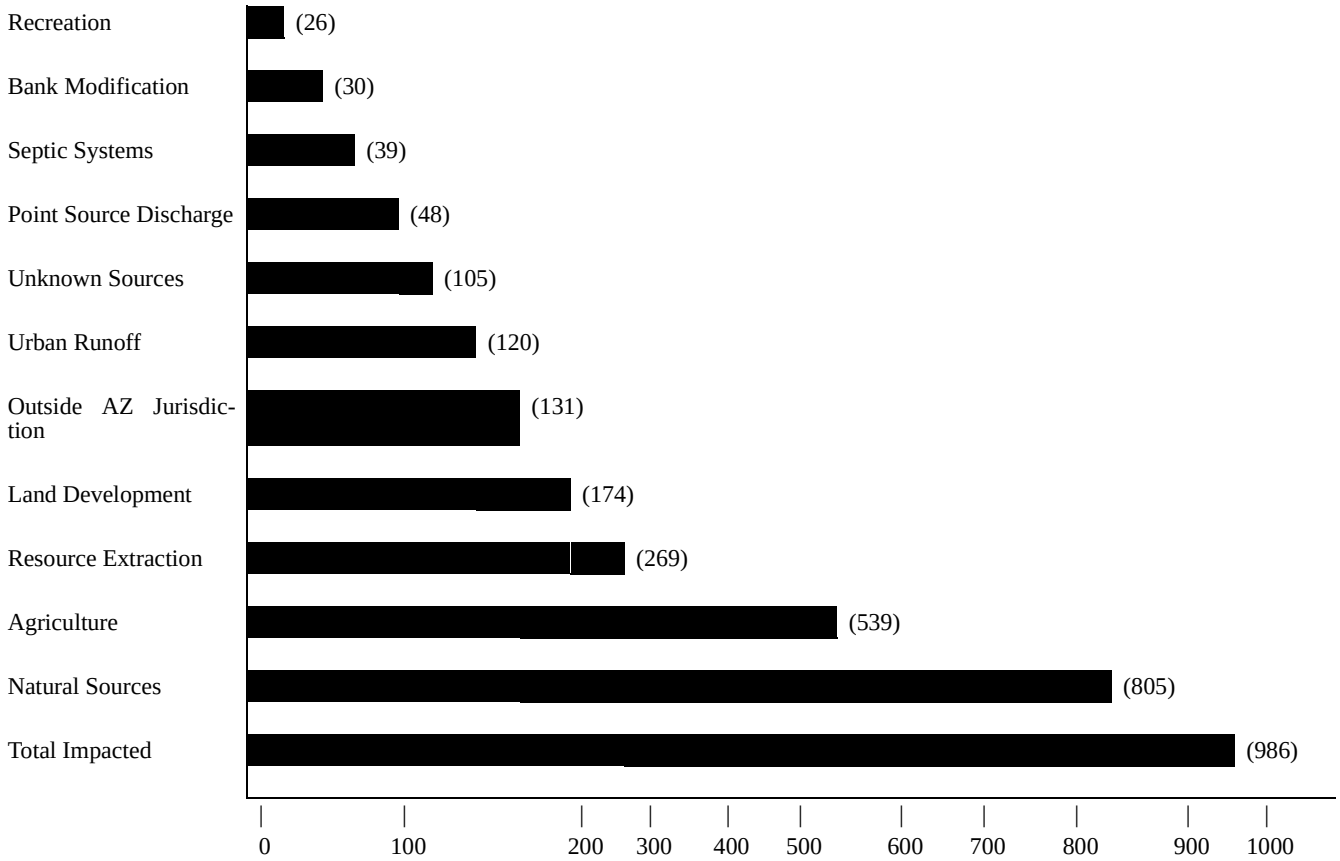
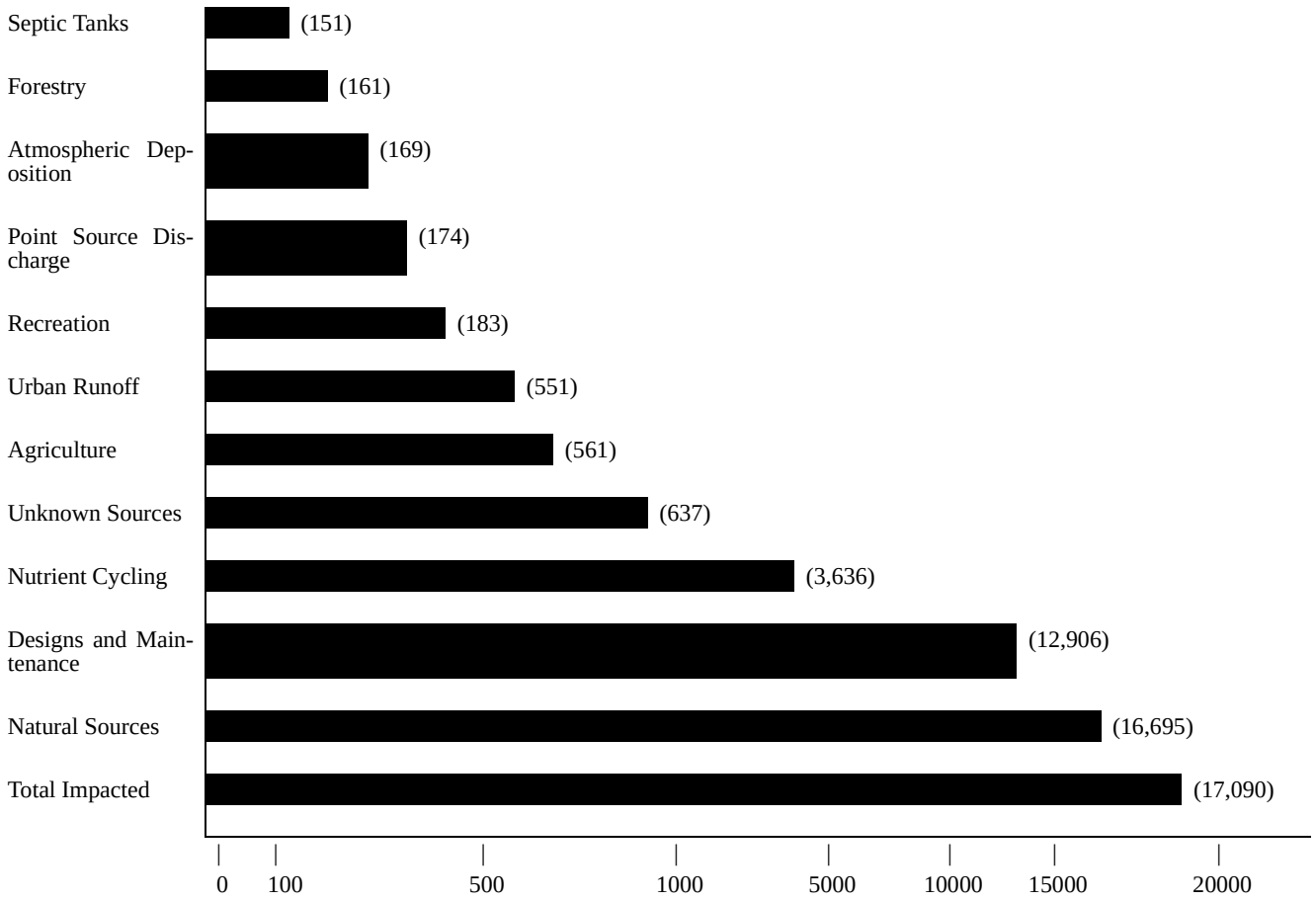


Figure 4. Probable Pollutant Sources in Lakes

(Acres of Lakes Impacted)



Certain pollutants in surface waters are due to *natural background* conditions. In many areas, Arizona's soils are highly erodible or have naturally elevated levels of certain metals. Both the assessment and listing processes have criteria that factor in certain aspects of natural background. The contribution of natural background conditions to a surface water's impairment is investigated during TMDL analysis on the listed water. If impairment is solely due to natural conditions and not as a result of man's activities, it is not a violation of a surface water quality standard and the water can be delisted.

Excessive *nutrient loading* and *internal nutrient cycling* are problems in Arizona's lakes. Sources of nutrients include irrigated agriculture, gardening practices, and urban and suburban property development. These nutrients cause algae and other aquatic plants to grow in lakes and deprive aquatic life of vital oxygen. Algae and vegetation growth can make lakes unusable for recreation. The *design and maintenance* of man-made lakes or reservoirs can contribute to impairment. The physical characteristics of the lake, such as depth, volume, and flushing rate must be balanced with natural sediment inputs and trophic conditions.

Agriculture activities, both grazing and crop production, are a probable source of pollutants, such as turbidity, boron, selenium, nutrients, fecal coliform, and pesticides. Since grazing remains a dominant land use by total acreage in Arizona, it is frequently indicated as a probable source of sediment loading and other pollutants to streams and lakes.

Resource extraction is a major source of metals and low pH. Mining occurs in areas where metal ores are naturally present in rock and in placer deposits, therefore, a portion of the loading is natural background conditions. The activities involved in the resource extraction can contribute other pollutants to streams and lakes, such as total dissolved solids, turbidity, and metals.

Arizona's TMDL Program

Arizona has completed 24 TMDLs since 1998 and over 50 TMDLs are in various stages of development. A.R.S. Title 49, Chapter 2, Article 2.1, effective July 18, 2001, establishes the process by which the Department implements the TMDL program and addresses polluted surface waters through the identification of impaired waters, the development of TMDLs, and the implementation of a TMDL reduction program. Key provisions of the program require the state to:

1. Prepare a list of impaired waters at least once every five years to comply with the requirements of section 303(d) of the Clean Water Act;
2. Consider only reasonably current, credible, and scientifically defensible data to determine whether a surface water is impaired;
3. Adopt rules describing the methodology used to identify impaired surface waters, including criteria for data to be considered current, credible, and scientifically defensible, implementation procedures for determining impairment based on a narrative or biological criterion, statistical or modeling methodologies for identifying impairment, criteria for removing a surface water from the 303(d) List, and factors to prioritize listed surface waters for TMDL development;
4. Include a priority ranking of the impaired waters for TMDL development for each new 303(d) List. The first list submitted under this rulemaking (due to EPA on October 1, 2002) must contain a schedule sufficient to ensure that all required TMDLs will be developed with 15 years from the date EPA approves the list. Surface waters, included for the first time on subsequent lists, must have TMDLs developed within 15 years from the date of initial listing.
5. Develop TMDLs using statistical and modeling techniques that are validated and broadly accepted by the scientific community and establish TMDLs to meet applicable surface water quality standards, including a reasonable margin of safety, taking into account variables related to the type of surface water, unknowns regarding relationships between effluent limitations, water quality, and seasonality;
6. Establish an implementation plan for each TMDL that explains how the allocations and reductions in existing pollutant loadings are achieved and specify the time-frame for which compliance with surface water quality standards is expected; and
7. Provide multiple opportunities for public notice and public comment on the following and provide response to comments before submittal to EPA:
    a. Initial and final draft listings,
    b. Draft pollutant loadings and allocations among the contributing sources, and
    c. Implementation plans.

303(d) Listing Process

Impaired waters not attaining their designated uses are identified during the biennial development of the 303(d) List. This rulemaking identifies the Department's approach for identifying and listing impaired surface waters and for prioritizing impaired waters for TMDL development.

R18-11-602. Credible Data

The intent of the 303(d) List is to identify impaired surface waters so that corrective actions can be taken. Therefore, it is critical that the listing process accurately identify when impairment exists. This means that the data needs to be of high quality and must accurately reflect the surface water conditions.

40 CFR 130.7 requires states to "assemble and evaluate all existing and readily available water quality-related data and information to develop the list." A.R.S. § 49-232(B) provides that the Department consider "only reasonably current, credible, and scientifically defensible data" to determine whether a surface water is impaired. The credible data requirements of this Section establish the criteria by which to ensure that data used to identify impaired waters are reasonably current, credible, and scientifically defensible. These requirements apply when the Department conducts water quality assessments and when monitoring entities (including the Department, municipalities, industry, volunteers, and federal and state land and resource management agencies) develop monitoring programs to collect data that ultimately may be used in the assessment, listing, and TMDL development processes.

One of the first steps the Department undertakes when developing the assessment is to assemble all existing and readily available water quality-related data. In addition to data gathered by or for the Department, U.S. Geological Survey (U.S.G.S.) collects data for the Department under contract, staff contacts various agencies, institutions, and groups involved in water quality or environmental efforts to solicit available data and documentation. This includes tribes, local governments, watershed councils, private and public organizations, point source dischargers, volunteer monitoring groups, and private individuals. The data may include chemical, physical, benthic, habitat, or toxicity testing data collected from a variety of sources, such as fixed-stations, intensive surveys, or other types of field investigations. It also includes instream water quality data that are collected under the requirements of a NPDES or AZPDES permit, including instream sampling required as a condition of a mixing zone or variance or stormwater data. Staff also accesses EPA's data management systems, such as the STORET database, for available information.

Once the data are assembled, it must evaluated to determine if is credible and scientifically defensible before using it to determine whether standards and designated uses are being met. All data used or reviewed in the assessment process are presented in the water quality assessment (305(b) Report). Data that cannot be used for evaluation are shown in the assessment with comments documenting why it was not used.

R18-11-602 provides the minimum quality assurance/quality control requirements for data to be considered credible and relevant for assessment and listing purposes, the monitoring entity must:

- Develop and submit a Quality Assurance Plan (QAP) that includes certain required elements, including the methods used for sample collection, field and laboratory analysis, and data management; and provide assurance that field and laboratory personnel are adequately trained and supervised;
- Develop and submit a site-specific or project-specific Sampling and Analysis Plan (SAP) containing required elements, including data quality objectives of the project and sound rationale for the selection of sampling sites, water quality parameters, sampling frequency and methods that assure the samples are spatially and temporally representative of the surface water, representative of conditions within the targeted segment at the time of sampling, and are reproducible;
- Ensure that data collection, preservation, and analytical procedures are those established in A.A.C. R9-14-610, which includes EPA methods, American Public Health Association *Standard Methods*, U.S.G.S. methods, and American Society for Testing and Materials (ASTM) methods, among others;
- Ensure that laboratory analyses are performed by a state-licensed laboratory, a laboratory exempted by the Arizona Department of Health Services for specific analyses under A.R.S. § 36-495.02, or a federal or academic laboratory that can demonstrate proper quality assurance/quality control equal to the requirements for state licensure; and
- Provide other information necessary to assist the Department in interpreting or validating the data.

The Department is responsible for reviewing all data to make certain that it meets specified minimum quality assurance requirements, including reviewing the adequacy of the QAP and SAP for the type of sampling undertaken. The rule provides the Department discretion in approving a QAP or SAP that does not contain all the required elements of R18-11-602(A) if the Department determines that the omitted element is not relevant to the sampling and its omission will not impact the quality of the results based on factors, including the type of pollutant being sampled, the type of surface water, and the reason for the sampling. Similarly, the rule allows the Department to review data that was generated before the effective date of the rule without a QAP or SAP, or was collected under a permit or enforcement action, provided the Department determines that the data yield results of comparable reliability based on the credible data requirements of the rule.

The rationale for the specificity of the credible data requirements is twofold. The water quality assessment and impaired water identification processes are reliant on having sufficient data both in terms of quantity and quality. Listing decisions not supported by sufficient data are potentially flawed. An incorrect finding that a segment is not impaired allows a potential human health threat or environmental degradation to go unrecognized. Incorrectly placing a segment on the 303(d) List results in the unnecessary expenditure of public resources. It is important that data used for listing decisions are credible. The concept of credible data ensures that only those surface waters for which adequate documentation of water quality standards non-attainment is or will be occurring are included on the 303(d) List.

EPA's draft "Consolidated Assessment and Listing Methodology (CALM) Guidance" dated April 20, 2001, identifies documenting data quality requirements and data evaluation procedures as a critical element that states should address:

> [N]ot all data are of equal value for assessing water quality standards attainment/impairment. Results or chemical data, or any other type of data, analysis are of limited value unless they are accompanied by documentation about sample collection, analytical methods, and quality control protocols. Poorly documented monitoring results may provide an indication of potential problems, corroborate other data and information, or trigger additional monitoring, but they are unlikely to support an attainment or impairment decision if they fail to meet the data quality objectives. (Section 3.2, page 3 - 8 in the CALM guidance document)

With respect to data quality, the draft guidance not only allows but encourages states to develop methodologies establishing minimum requirements concerning data quality and quantity:

> EPA encourages states to use the data quality objectives process to define minimum quality data requirements. This includes information on appropriate sample size and monitoring design, sample collection and handling protocols, analytical methods and detection limits, quality control procedures and data management (Section 3.2.1, pg 3-9).

All monitoring entities designing monitoring networks or monitoring projects are encouraged to consult with the Department to determine the sample design appropriate for their specific monitoring goals to ensure that the data will be deemed credible and relevant to impaired water identifications or TMDL decisions. Water quality data collection is being done by many entities for a variety of purposes. The monitoring entity will define the data quality objectives (DQOs) for their specific monitoring project. If the entity chooses to submit the results to the Department for use in assessment and listing, the Department will review the QAP and/or SAP for adequacy, including whether the DQOs are compatible with the Department's listing and assessment program.

Clearly defined quality assurance/quality control requirements "level the playing field" and serve to allay concerns by other monitoring entities as to the quality and adequacy of other monitoring programs. The Department collects much of the water quality data used in these processes, but also relies on other monitoring entities, such as the U.S.G.S., Salt River Project, and municipalities to assist in data collection. Across the country, volunteers in watershed groups and other organizations are monitoring the condition of streams, rivers, and lakes. The number and variety of these projects are on the rise as is the complexity of the projects and the uses of the data collected. One of the most difficult issues facing volunteer environmental monitoring programs, in particular, is data credibility. Potential users are often skeptical of volunteer data – what were the goals of the project; how were the volunteers trained; how were the samples collected, handled, and stored; and how was the data analyzed and reported? A key to breaking down this barrier is the proper preparation and execution of the quality assurance and sampling and analysis plans that address these issues. The Department will provide clear direction in the form of EPA guidance documents and example QAPs and SAPs that will be available on the Department's web site at http://www.adeq.state.az.us/ environ/water/assess/ tmdl.html, and from EPA documents, such as:

1. *EPA Requirements for QA Project Plans*, EPA QA/R-5, EPA/240/B-01/003; March, 2001;
2. *The Volunteer Monitor's Guide to Quality Assurance Project Plans*, USEPA, EPA 841-B-96-003, September 1996; and
3. *Sampling and Analysis Plan Guidance*, prepared by Quality Assurance Program, EPA Region IX, March 1997.

R18-11-603. General Data Interpretation Requirements

To determine whether data are credible and scientifically defensible, the Department will employ the following data conventions:

Laboratory Detection Levels

When dealing with environmental data, analytical laboratories will often report analytical results as "less than the reporting limit (RL)" or "less than the method reporting limit (MRL)." The reporting limit is different than the method detection limit or MDL, which is a statistically derived value, meaning that the analyte can be detected using that analytical procedure with 99 percent confidence that the analyte concentration is greater than zero. The RL/MRL is also different from the Practical Quantitation Limit (PQL), which is defined in the surface water quality standards as "the lowest level of quantitative measurement that can be reliably achieved during routine laboratory operations.) However, during discussions with Department of Health Services staff, it turns out that PQLs are generally an arbitrary multiple of the MDL (e.g., 3-10X the MDL) and lacks the precision necessary for assessment and listing purposes. There is language in the surface water quality standards relating to the enforcement of discharge permits and the use of PQLs. However, use of the PQL concept in this rule is not appropriate as the listing and assessment processes are not enforcement activities.

In cases where measurement datum is reported as "less than the RL" or "less than the MRL," the actual concentration of the chemical is unknown although it lies somewhere between RL/MRL and zero. How to evaluate these unknown quantities and when they should be used in statistical analyses are questions that arise in both assessment and listing decisions. The fact that many of the values are reported as nondetects is noteworthy, in that, it indicates the results are generally below a level of concern. However, there is no standardized way to determine the true value for these individual nondetect values. For use in this rule, the Department has adopted the term "laboratory detection limit" which means either the MRL or the RL, depending on which one the laboratory uses. These are analogous terms that describe the laboratory reported value that is the lowest concentration level on the calibration curve from the analysis of a pollutant. It is the lowest actual level the laboratory can quantify in terms of precision and accuracy.

Surface water quality standards, especially those to protect the aquatic and wildlife or fish consumption designated uses, are often set at very low levels. When the RL/MRL is at or below the standard, the actual measurement result reported as "less than the RL/MRL" will either equal the standard or be less than the standard. In either case, there is no exceedance. (See Example #1.)

When the RL/MRL is above the standard and the measurement result is reported as "less than the RL/MRL," there is a gray area in terms of knowing whether the sample is meeting or exceeding the standard. The pollutant concentration is greater than zero but the actual value may be anything from zero to the RL/MRL. The area between the standard and the MRL is the gray zone. (See Example #2.) The result may or may not be exceeding the standard. A measurement result that is clearly an exceedance of the standard will be evaluated at the reported value.

Concentration Scale	Example #1	Example #2
7		
6		
5		Reporting Limit
4	Water Quality Standard	
3		
2	Reporting Limit	Water Quality Standard
1		
0		
Evaluation ⇒	Meeting standard	Inconclusive

How the Department will address results reported as "less than the RL/MRL" will vary depending on the situation. To reduce the number of samples where the RL/MRL is greater than the standard (Example #2), the monitoring entity should specify that the laboratory use an approved analytical method with the lowest reporting limit that is less than or equal to the applicable surface water quality standard. If an analytical method is not available, the laboratory must use the method with the lowest RL/MRL. This is consistent with EPA Region 9 guidance for NPDES permits issued in Arizona.

When the datum is reported as "less than the laboratory detection limit," there are two possible paths.

1. When the sample result is reported as "less than the RL/MRL" and the RL/MRL is less than or equal to the surface water quality standard:
   a. The resultant value is considered as meeting the surface water quality standard; and
   b. If there is sufficient data to support statistical analysis, the Department will use the statistically derived values in trend analysis, descriptive statistics or modeling; or
   c. If there is insufficient data to support statistical analysis, the Department will use one-half of the value of the RL/MRL in trend analysis, descriptive statistics or modeling.
2. When the sample value is reported as "less than the RL/MRL" and the RL/MRL is greater than the water quality standard, the Department will not use the result in impaired water identifications or TMDL decisions.

This information is only provided as guidance and must be exercised with good judgement. A good reference on assessing data quality criteria and performance specifications is EPA's *"Guidance for Data Quality Assessment: Practical Methods for Data Analysis, QA00 Update"* EPA QA/G-9, EPA/600/R-96/084, July 2000.

Field Equipment Specifications

Several water quality parameters have very short holding times for analysis or give a more accurate representation of conditions if measured in the field. These parameters include dissolved oxygen, pH, total residual chlorine, turbidity, and temperature. Studies document a wide range of errors associated in taking field measurements under natural conditions. Errors can be introduced, depending on instrument selection, calibration method, placement of the instrument in the stream, or opacity of the instrument case, such as clear versus opaque. Some of these errors are addressed through quality assurance/quality control procedures, others are inherent in the variations in natural systems.

Most aquatic organisms can tolerate or adapt to small fluctuations over short periods of time for conventional water quality parameters without deleterious effects. When a field sample measurement is within the *manufacturer's specification for accuracy*, the result is considered to meet the surface water quality standard. Manufacturer's specifications change over time as technology improves. Rather than codify one set of specifications in the rules that will need to be amended perhaps yearly, the Department will identify the field equipment specifications for each listing cycle

or for each TMDL developed. For the 2002 listing cycle, pH is ± 0.2 standard units, dissolved oxygen is ± 0.2 mg/l, and turbidity is ± 2 NTU.

Invalid Data

Invalid data will not be used for placing a surface water or segment on the Planning List, the 303(d) List or for TMDL development. Invalid data includes results outside the range of possible physical or chemical measurements for the parameter or equipment, uncorrected data transcription or laboratory errors, and outliers, verified through statistical analysis as not being measures of water quality and for which further analysis reveals cannot be corrected and, therefore, should be excluded from the dataset.

Data Conflicts

To resolve *potential data conflicts*, the Department will consider a number of factors, including the age of the data, the accuracy and reliability of the monitoring methods and procedures, the amount of data, or the frequency of data collection, under what conditions the data were collected and whether these conditions were representative of the surface water. Generally, newer results are considered over older data unless the older data are more representative of critical flow conditions, more frequent data collection is favored over nominal datasets, and results from more rigorous methods or procedures are weighted over less precise methods or procedures.

Statistical Tests and Modeling

The Department, where necessary, will employ fundamental statistical tests or modeling, appropriate for the collected data and type of surface water, in an impaired water identification, or TMDL decision. The Department currently uses basic descriptive statistical tests, including the measure of central tendency, such as arithmetic mean, geometric mean, median, or mode of a dataset when evaluating whether samples meet or exceed a surface water quality standard. However, as more data are collected as part of the statewide network of monitoring stations, the Department will begin evaluating trends in water quality at specific locations and may use additional statistical tests, such as regression or correlation analyses. This rule allows the Department to use the statistical tests that are appropriate for the collected data and the type of receiving water, when necessary.

A.R.S. § 49-232 also requires that the Department use methods of sampling and analysis, including statistical and modeling techniques, that are generally accepted and validated by the scientific community as appropriate for assessing the condition of the given surface water or in TMDL development. This rule identifies several of the modeling methodologies currently being used by the Department and its contractors in TMDL development and that may be used in the future. As science of modeling evolves, additional approaches will become available and may be used in analyses.

R18-11-604. Types of Surface Waters Placed on the Planning List and 303(d) List

This rule provides the basis of the two-part consolidated list for assessment and listing decisions. The rule describes what surface waters will go on the Planning List or the 303(d) List, what surface waters will not be listed, and how surface waters are segmented for listing. It also establishes that surface waters or segments can move back and forth between the Planning List and the 303(d) List for individual pollutants based on the criteria in the rule.

The Department has identified Arizona's streams and rivers for assessment purposes initially on EPA's Reach File System, a geographic information display system of all the hydrography within a drainage area. The Department further segmented these reaches according to site specific water quality standards or where there is a change in the designated use. EPA recently replaced the Reach File System with the new National Hydrography Dataset (NHD), which contains much of the original digitized hydrography, but without the segmented reach numbers. EPA now requires states to transition to the NHD by the next assessment following the 2002 List. Arizona's 2002 list will be based on the current Reach File 3 system until the transition to the NHD is complete. Surface waters, including lakes, placed on the Planning List may be further delineated, as a result of the targeted sampling efforts, before placement on the 303(d) List so that only that portion of the stream or lake, such as a cove or beach, is listed as impaired.

Not all water quality standards exceedances result in a surface water being identified as impaired. Certain situations are specified in the rule as non-applicable to determining impairment. Surface waters will not be placed on either the Planning List or the 303(d) List for non-attainment of water quality standards, when:

1. Pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of water quality standards;

2. Water quality results collected under a moderating provision of a NPDES permit, such as a mixing zone, provided the result doesn't exceed the alternate discharge limitation established in the permit; or

3. The non-attainment is due to an activity or situation exempted under the surface water quality standards in R18-11-117 (canals and municipal park lakes), R18-11-118 (dams and flood control structures) or R18-11-119 (natural background).

The National Research Council's report to Congress and EPA supports the concept that water quality standards are the benchmark for establishing whether a waterbody is impaired. If the standards are inappropriate or inaccurate, all subsequent analysis is affected. The report urges states to developed "appropriate water quality standards" before a TMDL is developed and specifies that the framework of the Clean Water Act provides the opportunity for the analyses in the use-attainability (UAA) and site-specific criteria processes. The Department fully supports the concept of ensuring that the appropriate water quality standards are adopted for each waterbody and advocates use of the mechanisms within the standards program to achieve this. It is possible, however, that a water quality standard or designated use may be inappropriate, but not discovered as such until a surface water or segment is placed on either the Planning List or the 303(d) List. It is often during the intensive investigation on an impaired water that these facts come to light. In these situations, the Department will pursue the development of either the UAA or site-specific standard, or other remedy as appropriate.

Planning List

The rule specifies that the Department develop a Planning List to prioritize surface waters for: (1) monitoring and evaluation as part of the overall watershed management approach, and (2) evaluate each surface water or segment for impairment based on the criteria in R18-11-605(D), and identify the source of the impairment. The Department will provide the Planning List to EPA for informational purposes. As part of the integrated report, the Department will place a surface water on the Planning List if it meets the listing criteria in R18-11-605(C) or for a number of other reasons outlined in the rule including:

- Some monitoring data exists but there is insufficient data to determine whether the surface water is attaining or not attaining;
- The surface water was on the 1998 303(d) List, but the data used in the original listing do not meet the credible data requirements of the new rule or there are insufficient samples for a determination;
- The surface water was on the 1998 303(d) List and there has been a change in a water quality standard or designated use, but there is insufficient data to determine if the surface water will meet the new standard; or
- Trend analysis using credible and scientifically defensible data indicate that surface water quality standards may be exceeded by the next assessment cycle. Current federal regulations do not require states to list threatened waters on the 303(d) List. If federal regulations are changed and threatened waters must be listed, these waters will be added to the 303(d) List.

The Planning List will also contain a number of surface waters or segments that are considered "not attaining" waters. Based on EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*, these waters are actually "impaired" but are not listed on the 303(d) List because a TMDL does not need to be developed for the following reasons:

- A TMDL has been completed for the pollutant and approved by EPA. The surface water may be placed on the Planning List while further monitoring is conducted to ensure the TMDL strategy will result in water quality standards being attained;
- Exceedance of the water quality standard, but a TMDL will not be developed because the impairment is due to pollution, but not a pollutant, therefore, a TMDL or pollutant loading calculation is not possible; or
- The surface water is expected to attain its designated use by the next assessment through existing or proposed technology-based effluent limitations or other pollution control program under local, state, or federal authority, where the clean up is complete, or where proper documentation is provided to assure the remediation will occur; therefore a TMDL is not required at this time. If by the time of the next assessment and listing process the surface water is not achieving standards the waterbody will be listed on the 303(d) List.

The Department will prioritize waters on the Planning List for further investigation similarly to those on the 303(d) List for TMDL development. The Department will concentrate on those surface waters listed for toxic pollutants and/or multiple exceedances first, followed by waters for any exceedances and then those waters needing additional data. The Department intends to address all waters on the Planning List within two watershed rotation cycles concentrating on those higher priority waters in cycle 1.

A number of these factors were included as a result of the *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*, issued by EPA on November 19, 2001. The Planning List consolidates parts 2, 3 and 4 from this listing guidance into one comprehensive list that will be managed by the Department to track the various subcategories. A preliminary review of the draft 2002 Assessment indicates that a number of surface waters or segments will be designated as part 2 or part 3 because there is insufficient or inconclusive evidence to determine impairment.

303(d) List

Surface waters that the Department determines are impaired due to a pollutant, based on the criteria in R18-11-605(D), and require a TMDL, will be placed on the 303(d) List. This rule also provides for listing a "threatened" water, if federal regulations are clarified and require states to list the water on the 303(d) List.

R18-11-605. Evaluating a Surface Water or Segment for Listing and Delisting

This rule identifies the process the Department uses to determine (1) if a surface water or segment is not attaining or impaired, and whether it is placed on the Planning List or the 303(d) List; or (2) whether there is water quality evidence or factors to support the removal of a surface water, segment or pollutant from either List.

A.R.S. § 49-232(B) requires that the Department consider only "reasonably current, credible and scientifically defensible data" in identifying a surface water as impaired or in any TMDL decision which includes prioritizing an impaired water for TMDL development, developing the TMDL, or developing a TMDL implementation plan.

The process incorporates the ability to evaluate the data for exceedances of the numeric and/or narrative water quality standards in the context of the setting, time of year, and designated uses, to determine if the exceedance has a true negative effect on water quality and is a violation of water quality standards. Water quality conditions vary from place to place (spatial) and from time to time (temporal). This occurs because changes in factors, such as geology, vegetation, elevation, or climate can impact the natural or ambient water quality. In response to these changes, macroinvertebrates, fish, and algae evolve with different life histories, physiologies, and mobilities. These reasons coupled with knowledge of how water quality standards are developed, mean that not every standard exceedance automatically constitutes a violation of standards or is indicative of impairment.

The steps outlined in this process are not intended or designed for use in determining compliance with permits for enforcement purposes, as these activities often require additional information or use data that are not appropriate for assessment purposes, such as end-of-pipe discharge data. Portions of the surface water quality standards specifically dealing with compliance and enforcement actions or determining compliance with standards are *not applicable* to this process, for example, provisions regarding Practical Quantitation Limits or enforcement provisions.

Weight of Evidence Approach

A surface water may be found impaired or not attaining based on an evaluation of multiple indicators of water quality, including biological, physical, and chemical data that demonstrate non-attainment of numeric or narrative standards, designated use impairment, or a declining trend in water quality or the health of the biotic community. When evaluating the data, the Department will consider:

1. Data collected during critical conditions separately from the complete dataset, if the data show the surface water to be impaired during those conditions and attaining uses at other times;
2. The quality of the data with higher quality data given preference in a listing decision. Quality is established on the reliability, precision, accuracy, and representativeness of the data, including the age of the data, the frequency of the measurements, and whether the data provide a direct measure of impact or is a surrogate; and
3. Whether the data indicate the impairment is due to persistent, recurrent, or seasonal conditions.

The Department uses a "weight-of-evidence" approach to assessments and listing, where the strengths and limitations of each dataset are weighed and considered. A surface water is not, by default, impaired because one dataset indicates possible impairment, while another dataset shows it attaining its uses. With a weight of evidence approach, the Department evaluates: (1) the numeric data for exceedances of numeric water quality standards; (2) data for exceedances of narrative water quality standards; and (3) other relevant information when making its determination whether the exceedance results in an impairment that is recurring, persistent, or seasonal in nature. The weight of evidence approach does not, however, preclude the Department from making a determination of impairment based on a single line of evidence, if the data provide clear and convincing evidence of impairment or non-attainment. Other relevant information that aids in determining whether the impairment is due to a pollutant, suspected pollutant, or naturally occurring condition, includes the role of soil, geology, hydrology, flow regime, natural processes, and anthropogenic influences; the characteristics of the pollutant; effluent discharge data; and the direct evidence of impacts to aquatic life, wildlife, or human health where the impacts can be linked to water quality conditions in the surface water.

A.R.S. § 49-232(E) requires that a surface water may not be listed, based on biological or narrative criteria without the development and adoption, by the Department, of a narrative implementation guidance for the specific criterion. This law also states that the Department cannot list a surface water, based upon the evidence of a narrative standard exceedance when the pollutant of concern is not exceeding the numeric water quality standard, unless the evidence indicates that the numeric standard is insufficient to protect the surface water and the Department provides the scientific basis for the determination of use impairment.

Due to timing issues, the Department is deferring rulemaking on narrative standards implementation procedures to a separate stakeholder effort after the formal adoption of this rule. Separate rulemakings will be initiated to adopted elements of these implementation procedures into the impaired waters identification rule or the surface water quality standards rule, as appropriate.

After looking at all the evidence and weighing the factors, if the Department determines that a surface water or segment is impaired, the surface water or segment, and the identified pollutant, are placed on the 303(d) List. If it does not meet the criteria for listing on the 303(d) List or is found to be not attaining, the surface water or segment, and the identified pollutant, will be placed on the Planning List for additional monitoring.

Evaluation of the Numeric Dataset for Sufficiency and Representativeness

Before assessing whether a surface water is meeting numeric water quality standards, the Department must determine if there are a sufficient number of samples and whether those samples are spatially and temporally representative of the water quality in that surface water. If there is an insufficient number of samples or the number of samples are not representative, the water will be placed on the Planning List for further monitoring.

Sufficiency of spatial coverage takes into account the distribution of monitoring locations on the surface water, sources of pollution, and influences of tributaries or other significant hydrologic or hydrographic features. Samples are considered "spatially independent" if data are collected from stations or locations that are more than 200 meters (~ 0.1 miles) apart. Data collected less than 200 meters apart may be considered spatially independent if it is to characterize the effect of an intervening tributary, outfall, pollution source, or significant hydrographic or hydrologic change. Unless there is sufficient data developed during initial data collection or through targeted monitoring to further delimit the extent of impairment, the data are used to characterize an entire reach or lake. The Department will consider the spatial extent of the evaluation as representative of an entire lake when the same factors mentioned previously are considered. Arms or portions of a lake may be treated separately if there is sufficient evidence of differing influences.

Available data are evaluated to ensure that there is an avoidance of temporal bias and to ensure that seasonality, where applicable, is represented in the sampling plan. Samples are considered "temporally independent" if they are collected at the same station or location more than seven days apart. As noted above, multiple samples could be collected on the same day but they would have to be collected at spatially independent stations. For assessment and impairment evaluation, information and data should generally be no older than five years. As a general rule, when doing a given assessment, the Department will concentrate on data within a five and a half year window preceding the assessment period. For example, the 2002 assessment primarily uses data from October 1, 1996 through September 30, 2001, which anticipated an April 1, 2002 submittal date. When EPA announced the delay in list submittal, Arizona, like most states, had already completed the collection and data analysis portion of the assessment -- so the window was not changed. Older data may be used on a case-by-case basis if conditions have not changed and the older data are still representative, or the older data are used with newer data to demonstrate water quality trends. If used for listing, the Department will include an explanation why this older data continue to reflect current water quality conditions. The occurrence of major mitigation or remediation efforts will be considered during evaluation and some waters may be assessed based only on data collected after the mitigation actions are implemented.

When multiple samples taken from a surface water or segment are not spatially or temporally independent or when lake samples are taken from a specific location but from multiple depths, these measurements are not considered spatially independent so should be aggregated and statistically represented by a single resultant value. The proper statistical measure to represent the dataset is determined based on the type of water quality standard. This is described in the general data interpretation section under R18-11-603(7).

The measure of central tendency for the dataset will be used to evaluate an exceedance of the following water quality standards:

- Human health and agricultural uses, except for nitrate and nitrate/nitrite (18 A.A.C. 11, Article 1, Appendix A, Table 1);
- Chronic standards based on a four-day mean value (18 A.A.C. 11, Article 1, Appendix A, Table 2);
- Any pollutant expressed as an annual or 30-day geometric mean (the specific number of samples necessary to evaluate either of these is expressly defined in A.A.C. R18-11-101);
- Single sample maximum standards for temperature, turbidity, nitrogen, and phosphorus (A.A.C. R18-11-109 and R18-11-112);

- Radiochemicals (A.A.C. R18-11-109(I)(2)); and
- Except for chromium, all single sample maximum standards for "unique waters" (A.A.C. R18-11-112).

The maximum value or "worst case" value of the dataset used to evaluate an exceedance of the following water quality standards:

- Acute standards (18 A.A.C. 11, Article 1, Appendix A, Table 2);
- Nitrate or nitrate/nitrite (18 A.A.C. 11, Article 1, Appendix A, Table 1);
- Acute standards for "unique waters" (A.A.C. R18-11-112);
- Single sample maximum standards for bacteria (A.A.C. R18-11-109(B));
- 90th percentile standards for nitrogen and phosphorus (A.A.C. R18-11-109(H) and R18-11-112) (The specific number of samples necessary to evaluate the standard are expressly defined in A.A.C. R18-11-101);
- For dissolved oxygen measurements, the "worst case" value is the minimum value; and
- For pH measurements, the "worst case" value means both the minimum and maximum value of the dataset.

Evaluation of Numeric Standard Exceedances

In assessing water quality throughout the state, the Department must draw conclusions about specific surface waters based on a group of measurements for a particular pollutant of interest. The entire collection of measurements used as the basis for conclusion is referred to as a population. In general, it is impossible to obtain all of the measurements for a population, so it becomes necessary to attempt to describe the population as reliably as possible by collecting a set of samples from that population. There is always potential for error in this process. In assessment and listing decisions, there are two types of error.

Type I error: Inappropriately classifying a surface water as impaired, when it is actually attaining.

Type II error: Inappropriately classifying a surface water as attaining, when it is actually impaired.

Historically, EPA guidelines suggest that a surface water be listed as impaired when greater than 10 percent of the measurements of water quality conditions exceed standards for conventional pollutants *Guidelines for Deriving Numerical Natural Water Quality Criteria for the Protection of Aquatic Organisms and their Uses*, USEPA, NTIS PB85-227049). Using this "raw score approach," a surface water is considered "fully supporting" its designated use if the calculated exceedance rate is 10 percent or less; "partially supporting" if the exceedance rate was greater than 10 percent but less than or equal to 25 percent; and "not supporting" if the exceedance rate was greater than 25 percent. Recently EPA and states have dropped "partially supporting" for assessment purposes. According to "Statistical Assessment of Violations of Water Quality Standards under section 303(d) of the Clean Water Act," published in *Environmental Science and Technology*, Vol. 35, 2001, Smith, Ye, Hughes and Shabman, EPA's "raw score" approach does not include consideration of the likelihood and costs of making an erroneous listing decision.

In light of the concerns with EPA's traditional assessment methodology, various states, including Arizona, have begun looking into alternate methods of statistical decision making for water quality assessments. Given uncertainty in the measurement and sampling process, hypothesis testing is one statistical tool that has been explored where the null hypothesis is that the site *is not* impaired and the alternative hypothesis is that the site *is* impaired. The hypothesis is stated in terms of p, the true degree or probability of impairment and p_o, the "safe level." The decision is based on the test of H_o: $p \leq p_o$ versus H_1: $p > p_o$, where p_o is a constant between 0 and 1, allowing the two error rates to be evaluated. The error rates are bounded by 0 and 1, with 0 indicating no error. Given the generally small samples sizes available on any given surface water, neither error will be close to zero. Because both types of error will always be present, the analyst must choose the tolerable amount of error.

Several states have used the binomial testing approach, which focuses on the probability of a violation as an alternative to the raw score method. The binomial method assigns results that exceed standards a value of 1 and those that meet standards a value of 0. When "n" independent samples are collected, the number of observations exceeding the standard can be expressed as a binomial random variable with parameters p and n. The hypothesis becomes the probability of exceeding the standard is less than or equal to 0.10 (Ho: H_o: $p \leq 0.10$ = not impaired) versus the alternative that the probability is greater than 0.1 (H_1: $p > 0.10$ = impaired). With this approach, error rates can be evaluated and a process developed to limit the error rates.

In typical statistical analysis, the Type I error rate is chosen by the assessor. If the rate chosen is 0.10, there is a 10 percent chance of making a Type I error. With the binomial method, the choice of Type I error rate determines the

trigger value. For a given sample size "n," the trigger is selected as the number of violations to make the probability of this many or fewer violations be as large as possible but less than the Type I error rate. Once the trigger and the alternative for frequency of violation is known, the Type II error rate can be calculated. The Type II error rate can be reduced by choosing a greater Type I error rate, by increasing sample size and/or by decreasing measurement uncertainty. It is a common practice to select the Type I error rate at 0.05 or 0.10 and control Type II through the size of the sample. In the draft CALM guidance, EPA recommends balancing Type I and Type II error rates at the 15 percent level. In general, EPA supports setting a somewhat lower Type I confidence rate to balance Type II error but suggests states increase sample sizes to manage Type II error.

Tables 1 and 2 in the rule are based on work done by the Florida Department of Environmental Protection in support of Florida's June 2001, 303(d) listing rule (*A Nonparametric Procedure for Listing and Delisting Impaired Water based on Criterion Exceedances*, Lin, Meeter and Nui, October 2000). This listing methodology is based on the binomial distribution method and the premise that a surface water is listed if its true exceedance probability for a pollutant is greater than 10 percent. In an effort to balance the two types of error, this rule uses two different confidence levels, two different minimum sampling sizes, and cutoff values aimed at making the error rates as close as possible. For placement on the Planning List, the rule requires a minimum of 10 samples; a confidence level of 80 percent and cutoff beginning at three exceedances. For placement on the 303(d) List, the rule requires at least 20 samples; a confidence level of 90 percent and cutoff beginning at five exceedances. In addition, the rule provides the Department opportunities to list a surface water segment, without having the requisite 10 or 20 samples, for specific pollutants, such as toxics or bacteria, that pose a substantial threat to aquatic life, wildlife, and human health.

This methodology is a departure from previous methods of assessment and requires a significant increase in the sample size. This rule does not differentiate sampling requirements based on type of waterbody, such as perennial, intermittent, or ephemeral. To address the need to acquire additional data and recognizing the low annual precipitation rate in many parts of the state, the Department has committed to create a new targeted monitoring team and to refocus portions of the ambient surface water monitoring efforts to address this issue. The Department currently schedules its ambient monitoring based on a watershed rotation cycle. In the future, more emphasis will be given to verification and targeted monitoring in the chosen watersheds and on waters when exceedances indicate potential problems or where there is insufficient data to make assessment decisions. This rule will provide other monitoring entities with the quality information necessary to ensure datasets are considered credible and scientifically defensible, the Department can use their data in assessment and listing activities.

Planning List

When evaluating a surface water for placement on the Planning List, the Department considers, at a minimum, ten spatially and temporarily independent samples collected over three or more temporally independent sampling events. The surface water will be placed on the Planning List if the number of exceedances of an applicable surface water quality standard is greater than or equal to the number listed in Table 1, based on the sample size. Table 1 starts with three exceedances based on a minimum sample size of 10. Table 1 is based on a binomial distribution that determines at a 80 percent confidence level that the actual frequency of standards exceedance is greater than or equal to 10 percent.

Because of the higher probability of error in datasets of less than 10 points, the rule provides an exception to the binomial approach. A surface water may be placed on the Planning List when there are three or more temporally independent samples exceeded of a surface water quality standard, based on lifetime or long-term exposures, including radiochemicals, agricultural criteria, field parameters, bacteria, and all human health criteria.

303(d) List

When evaluating a surface water for impairment due to numeric water quality standards, the Department considers, at a minimum, 20 spatially and temporally independent samples collected over three or more temporally independent sampling events. The surface water is considered for placement on the 303(d) List if the number of exceedances of an applicable surface water quality standard is greater than or equal to the number listed in Table 2, based on the sample size. Table 2 starts with five exceedances based on a minimum sample size of 20. Table 2 is based on a binomial distribution that determines at a 90 percent confidence level that the actual frequency of standards exceedance is greater than or equal to 10 percent.

Based on EPA guidance, the Department may list a surface water or segment without the required number of samples or numeric standards exceedances in the following situations:

- Where any of the following surface water quality standards with potentially acute or toxic impacts are exceeded more than once in any consecutive three-year period during the established monitoring period:
  - — Acute surface water quality standards,
  - — Nitrate or nitrate/nitrate standards, or

— Single sample maximum standards for bacteria.

- Where there is more than one exceedance of an annual mean, 90th percentile, 30-day geometric mean, or four-day mean chronic criteria within the established monitoring period. To evaluate based on one of these standards, requires a minimum number of samples taken within a specific time-frame. These criteria are defined for the specific type of standard in A.A.C. R18-11-101. For example, evaluation of an "annual mean" standard requires the Department to have sufficient credible data to develop an arithmetic mean of monthly values determined over a consecutive 12-month period, providing "monthly values" are available for at least three months. The "monthly value" is the arithmetic mean of all values determined in a calendar month. Calculation of an arithmetic mean for the calendar month requires at least two, and preferably three or more individual data points. Therefore, the minimum number of samples needed to calculate an annual mean is six; the minimum number of samples necessary to find impairment is 12.

Any evidence of impairment based on an exceedance of numeric standards is used with other information, in the weight-of-evidence determination of actual impairment.

Evaluation of Impairment based on Narrative Water Quality Standards

In addition to numeric water quality criteria, designated uses are protected by narrative criteria, which state that a surface water shall be "free from" pollutants, alone or in combination with other pollutants, that cause floating debris or suspended solids; settleable solids, such as bottom deposits; odor, oil, or grease; off-taste; color present in the water beyond natural background levels; the growth of algae or aquatic plants that impairs an existing or attainable designated use; or that are toxic to humans, aquatic life, or wildlife.

Information about support or nonsupport of narrative criteria may consist of water quality studies, biological data, existence of fish kills, pollutant concentrations in tissue samples, beach closures, odor, off-flavor in aquatic organisms, photographic evidence, local knowledge, and best professional judgement. The analysis and determination of narrative criteria support is inherently less objective and consistent than that for numeric criteria and often uses associated numeric data where it exists and is applicable, for example, excessive aquatic plant growth associated with instream nutrient concentrations.

A.R.S. § 49-232(F) requires the Department to develop and adopt of narrative implementation procedures for both biological and narrative criteria before using evidence of impairment based on these standards for assessing and identifying impaired waters. Narrative implementation procedures are being developed for a number of the narrative standards, including the use of the narrative bottom deposits standard in wadeable, perennial streams; narrative toxicity and narrative nutrient standards. A separate stakeholder process and subsequent rulemaking will be conducted to develop and finalize these documents. Until the time that these documents are available, the Department is precluded from listing a surface water based on either biological or narrative violations.

Planning List

The Department will place a surface water or segment on the Planning List if there is evidence of a narrative water quality standards violation, but there is insufficient evidence based on narrative implementation procedures that have been adopted by the agency, or there are no implementation procedures adopted for the particular standard.

303(d) List

As noted above, until narrative implementation procedures are developed and adopted by the Department, state statute preludes the Department from listing surface waters based on narrative standards violations. Along with the 303(d) List, the Department submits to EPA the data used in making the assessment and listing decisions. The Department will work with EPA to identify waters that should be considered for listing based on an exceedance of a narrative standard. EPA has the authority under Title 33, Chapter 26. Subchapter III, Section 1313(d)(2) (303(d)) of the Clean Water Act, to place additional waters on Arizona's 303(d) List, if EPA finds sufficient evidence of impairment based on federal policies and regulations.

Removing a surface water, segment, or pollutant from the Planning List or the 303(d) List

This rule contains separate delisting subsections describing the removal from the Planning List and the 303(d) List. Waters will be removed from the Planning List when there is sufficient information to make one of the following determinations, either the surface water is impaired and should be placed on the 303(d) List, or the surface water is meeting numeric standards and attaining all uses.

There are a number of different ways for a water to be removed from the 303(d) List. In general, removing a surface water, segment, or pollutant from the 303(d) List is subject to the same requirements used in the listing decision. A.R.S. § 49-232(C)(4) requires that the criteria for delisting is no more stringent than the criteria for listing.

The reasons for delisting from the 303(d) List were developed primarily in response to the requirements in 40 CFR 130.7(b)(6)(iv) for states to demonstrate *good cause* for not including surface waters on the 303(d) List. Considerations to support delisting include more recent and accurate data showing that the surface water is meeting the appropriate surface water quality standard and/or the designated uses are being attained, more sophisticated water quality modeling, identification of flaws in the original analysis that led to the surface water being listed, changes in conditions, such as installation of new control equipment or the elimination of a discharge, or changes in water quality standards, guidance, or policy. Each of these considerations are found under R18-11-605(E)(2).

When collecting more recent data, conditions, such as sampling frequency, number of sampling events, and hydrologic or climatic conditions, should be similar to conditions occurring when the samples were taken, if those conditions still exist, indicating impairment and resulting in a listing decision. For example, if a listing was based on two successive years of an annual mean standard not being met, the Department will look for at least two successive years of data indicating that the standard is now being met. Another example is if a surface water was listed based on two exceedances of a toxic criteria within a three-year period, the newer data must contain at least three years of data showing no more than one exceedance of that criteria.

Surface waters or stressors can be excluded or delisted from the 303(d) List in either of the following situations:

- The Department has developed, and EPA has approved, a TMDL for the stressor or the surface water. A surface water that is delisted after development of a TMDL will be placed on the Planning List for followup monitoring to determine if the implementation strategies are effective and whether the TMDL allocations are satisfactory. The surface water may be added back to the 303(d) List if implementation strategies fail to eliminate the problem or if recommended strategies do not occur and the water quality remains impaired.
- A surface water was placed on the 303(d) List based on standard violations caused solely by natural conditions with no human caused influences. The "natural background" provision under A.A.C. R18-11-119, specifies that where pollutant loading from naturally occurring conditions alone are sufficient to cause a violation of surface water quality standards, the exceedance is not considered a violation. A.R.S. § 49-232(D) specifies that a surface water is not listed where the standard is exceeded solely due to naturally occurring conditions. The rationale for removal of a surface water or to exclude it from listing based on naturally occurring conditions must be sufficiently documented.

For example, a surface water that exceeds a water quality standard, but drained wilderness or similar areas, will meet the definition for natural background if it was well documented by the appropriate land management agency that there were no contributing human influences or activities. This surface water can be removed or excluded from the 303(d) List due to the natural background provision provided the judgment was documented by the land management agency that no past or present human influences had or were occurring that might contribute to a water quality standard exceedance. As noted earlier, the human-induced impacts on the waterbody are subject to remediation and will not be cause for exclusion from listing.

R18-11-606. TMDL Priority Criteria for 303(d) Listed Surface Waters

After states develop lists as required under section 303(d) of the Clean Water Act, they are required to prioritize the list for development of TMDLs. Section 303(d) states that each "state shall establish a priority ranking for these waters, taking into account the severity of the pollution and the uses to be made of such waters." As part of the ranking, each state must identify which "high" priority waters will be targeted for TMDL development within two years following the listing process. A.R.S. § 49-233 requires the Department to prioritize listed surface waters for development of a TMDL and identifies 17 factors that the Department must use. The Department added six additional factors to develop high, medium, and low categories of prioritization. These categories take into account factors, such as the severity of the impairment; impacts to designated uses of the receiving water; seriousness of the water quality problems; value of the resource; risk to human health, aquatic life, and wildlife; and the likelihood of success of TMDL implementation.

A priority ranking system is essential to establishing a work plan for developing TMDLs during the listing cycle. The Department considers all surface waters as important resources of the state. However, with dozens of segments listed, many for multiple pollutants, and the arid environment of the state, it is clear that not all TMDLs can be completed in the same time-frame. The amount of staff time and resource requirements may vary depending on the amount of existing information, complexity, type of pollutant, number of sources, resources available, staff turnover, and other issues. The methodology support document that accompanies the 303(d) List will explain in further detail how the Department will rank waters beyond the initial prioritization for targeted monitoring and for TMDL development.

A high or low priority ranking does not necessarily mean that a river or lake is more or less important, but rather it is a surface water selected for TMDL development based on the reasons identified in the prioritization process. It is important to understand that the priority ranking only addresses surface waters on the 303(d) List and is not a comprehensive prioritization of the value of surface waters statewide. The Department will continue to perform activities, such as water quality monitoring, permit issuance, and enforcement of state environmental regulations.

Generally, impaired surface waters are given high priority if the pollutant poses a substantial threat to the health and safety of humans, aquatic life, or wildlife; the surface water has been classified by the state or federal government for

special protection or is of important recreational or economic significance to the public; the surface water contains a listed threatened or endangered species under the Endangered Species Act; or there is a local priority, such as a wastewater treatment plant seeks to increased discharge capacity on an impaired surface water. Surface waters where the pollutants pose a substantial threat to humans, aquatic life, or wildlife, including endangered species; where the surface water is afforded special protections under state or federal rules, or where a NPDES or AZPDES permit is required, will be targeted for initiation of a TMDL investigation during the first two-years following issuance of the new 303(d) List.

Medium priority is given to surface waters that have ranking factors, such as failing to meet more than one of its designated uses or the pollutant exceeds more than one surface water quality standard; where impairment appears to be correlated with seasonal conditions that will require additional time to monitor; where the type of pollutant or other factor makes the TMDL complex; or where the administrative needs of the Department, including commitments with EPA, permitting requirements, or basin priorities, require completion of the TMDL.

A surface water will be given a low priority ranking, if, for example:

- The surface water is an ephemeral or intermittent water and the pollutant is not a threat to the health and safety of humans, aquatic life, or wildlife, nor does it contribute to the impairment of a downstream perennial surface water;
- The pollutant poses a low ecological or human health risk or there is insufficient data to identify the pollutant source;
- The surface water, segment, or pollutant has been proposed for delisting;
- The Department proposes modification to the applicable designated use or surface water quality standards, but the change has not been approved by EPA;
- There are international or interstate coordination issues; or
- Actions are occurring or have occurred that are expected to bring the surface water back to attaining water quality standards, including cessation of discharges, use of best management practices, or recently instituted treatment levels. For actions that have yet to occur, assurance that the controls are in place or there is a firm schedule for implementation is required before the surface water could be assigned a low priority.

Notwithstanding this ranking system, the Department may re-prioritize a surface water to take advantage of opportunities within a watershed, such as restoration or remediation efforts, requests from other entities, or to capitalize on efficiencies and geographic practicalities by coordinating TMDL development with other activities or programs. The Department has posted the status of TMDL development on its web site at http://www.adeq.state.az.us/environ/water/assess/tmdl.html and updates the site regularly. Where a listed surface water has a mixture of high, medium, and low prioritization factors, generally the presence of high priority factors will outweigh low and medium factors. An exception to this convention is when the low priority factors dealing with a known proposal to delist a pollutant or surface water is pending EPA approval; a known change in water quality standard or designated use is pending EPA approval; or known actions are occurring or have occurred that are expected to bring the surface water back to attaining in the near future. In these cases, the low priority factors under R18-11-606(B)(3)(a) through R18-11-606(B)(3)(c) may override the high or medium priority factors. The Department will continue to monitor these waters under the Planning List until it determines that the surface water is attaining its designated use.

The Department may complete a TMDL, initiated before the effective date of this rule, for a surface water or segment that was listed as impaired on the 1998 303(d) List but does not qualify for listing under the criteria in R18-11-605(D), if:

1. The TMDL investigation has established that the standard is not being met and that the allocation of loads is expected to bring the surface water to attaining,
2. The Department estimates that more than 50 percent of the cost of completing the TMDL has been spent,
3. There is significant community involvement and interest in completing the TMDL, or
4. The TMDL is included in an EPA-approved state workplan initiated before the effective date of this rule.

The Department will make an effort to facilitate intergovernmental cooperation between the state and adjoining states, federally recognized tribes in Arizona and Mexico, regarding listing decisions and TMDL development. Whenever possible, the Department will make these listing and TMDL decisions by mutual agreement, through the sharing of information, clarification of issues, and discussion. Several of Arizona's tribes have independent authority for setting water quality standards and implementing Clean Water Act regulations on reservation lands. The Department will cooperate on a government-to-government basis regarding natural resources during the development of the 303(d) List, especially during data assessment and in developing responses to comments on the listing. Cooperation during other listing tasks, including joint gathering of data and public involvement may be negotiated.

Developing Total Maximum Daily Loads

A.R.S. Title 49, Chapter 2, Article 2.1 requires that in developing TMDLs for listed surface waters, the Department comply with certain provisions, including using credible data that are representative of the type of surface water, the conditions by which the water was listed, and the use of broadly accepted statistical and modeling techniques. Any sampling or monitoring components of a required TMDL implementation plan must also comply with the credible data requirements. In developing TMDLs, the Department will use only statistical and modeling techniques that have been validated and broadly accepted by the scientific community. The modeling techniques chosen may vary based on the type of surface water and the quantity and quality of available data, provided it meets the credible data requirements. Examples of modeling methods that may be used by the Department or its contractors are given in R18-11-603.

7. A reference to any study that the agency relies on in its evaluation of or justification for the rule and where the public may obtain or review the study, all data underlying each study, any analysis of the study and other supporting material:

A Nonparametric Procedure for Listing and Delisting Impaired Waters Based on Criterion Exceedances, by Pi-Erh Lin, Duane Meeter and Xu-Feng Nui, October 2000. This study may be obtained from the Department, the Florida Department of Environmental Protection, 3900 Commonwealth Blvd. M.S. 49, Tallahassee, Florida 32399, Tallahassee, FL 32306-4330, or at http://www8.myflorida.com/environment/learn/waterprograms/tmdl/pdf/supdocument.pdf.

Consolidated Assessment and Listing Methodology (CALM), April 20, 2001, EPA (Draft Guidance Document). This document may be obtained from the Department.

2002 Integrated Water Quality Monitoring and Assessment Report Guidance, EPA memorandum, November 19, 2001. This guidance document may be obtained from the Department.

Statistical Assessment of Violations of Water Quality Standards under Section 303(d) of the Clean Water Act, published in Environmental Science and Technology, Vol. 35, 2001, by Eric P. Smith, Keying Ye, Chris Hughes and Leonard Shabman.

8. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact:

These rules establish procedures by which data will be collected and analyzed to determine whether a surface water is impaired and should be placed on the 303(d) List. The rule does not set TMDLs, nor does it address particular surface waters. The rules do not establish new water quality standards or criteria but instead clarify interpretation of existing standards. The costs for this rulemaking will fall primarily to the Department and affect only those agencies or entities that monitor state surface waters and choose to submit the data to the Department for use in assessing and in identifying impaired surface waters. The rules do not directly regulate businesses, farms, or any other sectors of the economy.

A. *Estimated Costs and Benefits to the Department of Environmental Quality.*

These rules affect the Department's surface water quality monitoring and assessment programs. Based on stakeholder input, the Department reexamined how it collects, reviews, and analyzes data for 303(d) listing purposes. The rules require the Department to formalize its process to assure that data used in the listing process is credible and relevant to an impaired water identification or a TMDL decision, and to develop a methodology for determining whether a surface water is impaired and should be placed on the 303(d) List.

The first step in developing a 303(d) List is compiling all readily available and existing data. The new rules require that the Department review data to ensure that it meets the credible data requirements (collected under an appropriately prepared QAP and SAP, for example). If questions arise concerning the data, the Department is responsible for reviewing the QAP and SAP and contacting the monitoring entity for additional data validation information, as necessary. This will require additional, but not significant staff resources to review the data submissions.

Department staff must determine whether there is sufficient data (at least ten temporally independent samples, for example) to evaluate the surface water and whether there is sufficient evidence of impairment for listing. Much of the data assessment protocols have already been developed as part of the state's 305(b) water quality assessment, and there are no additional costs to implement the assessment portion of these rules. If there is evidence of possible impairment in a surface water but documentation does not meet the minimum criteria for listing (insufficient number of samples, for example), the surface water will be assigned to the Planning List.

To develop a sufficient amount of monitoring information on the state's surface waters, the Department is creating a separate Targeted Monitoring Team to perform follow-up monitoring on both ambient sampling sites and post-TMDL monitoring sites. This team will start with four FTEs. Two FTEs are existing positions that will be reassigned. The other two FTEs are new positions. The Department anticipates that the first year cost of this new team is approximately $320,000 (Salaries and benefits: $140,000 new positions; $135,000 existing positions; equipment,

$45,000). While the Department cannot predict the amount of additional monitoring that will be needed, it is estimated that the annual monitoring budget for the Target Monitoring Team will be $150,000 to $200,000. (The Department's current ambient monitoring team budget is $375,000.)

B. *Estimated Costs and Benefits to Political Subdivisions.*

The credible data requirements of R18-11-602 will affect state and federal agencies and local governments who choose to monitor surface waters and submit the data for assessment, listing, and TMDL development. Resources expended to comply with this rulemaking will vary depending upon each entity's current procedures and resources. However, these entities are not required to submit data to the Department and any cost associated with this rulemaking is voluntary.

C. *Businesses Directly Affected By the Rulemaking.*

These rules do not regulate private businesses, residences, entities, or activities. Some regulated entities, volunteer and watershed monitoring groups, private individuals, and environmental groups may voluntarily submit data to the Department for consideration under this rulemaking, and if so, are required to meet the credible data requirements.

Persons or entities holding a surface water discharge permit – NPDES or AZPDES, may be required as conditions of that permit, to conduct instream water quality sampling. This information, if deemed credible and scientifically defensible may be use in an assessment and listing decision. At this time, not all NPDES and AZPDES permits contain quality assurance/quality control requirements sufficient to meet the rule. The Department will be working internally to ensure that language in permits, issued after the effective date of this rule, produce data that may be used for listing and assessment decisions.

R18-11-602(A)(6) requires that any laboratory submitting analytical results for listing or TMDL decisions be state-licensed, exempted by the state, or be a federal or academic laboratory that can demonstrate comparable quality assurance/quality control procedures. If a laboratory does not meet this criteria and wishes to submit analytical results, the laboratory must obtain licensing from the Arizona Department of Health Services and pay any associated fee.

D. *Estimated Costs and Benefits to Private and Public Employment.*

Private and public employment are not directly affected by the implementation and enforcement of this rulemaking.

E. *Estimated Costs and Benefits to Consumers and the Public.*

This rulemaking provides consumers and the public with a clearly defined listing process. The core of this process is based on sufficient, credible, and scientifically defensible data, which provides an increased confidence in the 303(d) listing process and TMDL decisions. The dual requirements of sufficient and credible data translates to higher confidence that a listed surface water is truly impaired.

This rulemaking ensures that impaired surface waters are recognized and that human health and environmental concerns are addressed. The prioritization criteria allows the Department to focus its efforts and resources on those surface waters in greatest need of restoration.

F. *Estimated Costs and Benefits to State Revenues.*

This rulemaking will have no impact on state revenues.

Requirements of A.R.S. § 41-1035.

1. Establish less stringent compliance and reporting requirements for small businesses.

   This rulemaking places minimum requirements on entities who choose to submit data to the Department for use in assessment and listing processes. The requirements assure the consistent application of the quality criteria to all those entities who choose to submit data under this program.

2. Establish less stringent compliance or reporting schedules or deadlines for small businesses.

   This rulemaking concerns the assessment and listing process and is not an enforcement program. Thus, no compliance or reporting schedules or deadlines are required.

3. Consolidate or simplify the rule's compliance and reporting requirements for small businesses.

   Consolidation and simplification of the impaired waters identification program has been achieved by specifying what must be contained in the Quality Assurance Plan and the Sampling Analysis Plan. The only reporting requirements consist of supporting documentation, described in the rule, if an entity chooses to submit data for assessment, listing, TMDL development, and maintenance of records for the duration of the listing.

4. Establish performance standards for small businesses to replace design and operational standards.

   The rule only establishes minimum quality assurance/quality control standards. The monitoring entity develops their own data quality objectives for its own monitoring efforts. If the monitoring entity submits the data to the

Department, it is the Department's responsibility to ensure that the objectives of the monitoring entity's sampling are compatible with the Department's needs for listing and assessment.

5. Exempt small businesses from any or all requirements of the rule.

   Entities are not required to monitor surface waters and submit the data for assessment, listing, and TMDL development and do so on a voluntary basis.

10. A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):

Rulemaking changes made as a result of responses to comments are described in item #11, a summary of the principal comments and the agency response to them.

Minor grammatical, formatting, renumbering, and other clarifying changes have been made throughout the rule package and have not been addressed in items #10 or #11.

Citations to the water quality standards A.A.C. R18-11-109 were updated. Updated surface water quality standards at A.A.C. R18-11-109 were submitted to EPA for approval on April 1, 2002. Federal regulations require formal EPA adoption of a state's water quality standards before those standards can be used for any Clean Water Act purposes, including water quality assessment and listing. State adopted standards may be used for state enforcement purposes but not for any federal action.

R18-11-601. Definitions

A typographical error was discovered in the definition of "spatially independent" at R18-11-601(19) and has been corrected as follows:

"Spatially independent sample" means a sample that is collected at a distinct station or location. The sample is independent if the sample was collected:

a. More than 200 meters apart from other samples, or

b. Less than 200 meters apart, and collected to characterize the effect of an intervening tributary, outfall or other pollution source, or significant hydrographic or hydrologic change.

Grammatical and clarification rule changes were made at the request of Council staff.

11. A summary of the principal comments and the agency response to them:

Miscellaneous Comments

Comment 3 - 1: The rule is generally consistent with recommendations made by the National Academy of Science's National Research Council (NCR) report to EPA entitled "Assessing the TMDL Approach to Water Quality Management." The rule as proposed will provide the necessary guidance, criteria and science-based decision making necessary to ensure that water segments are appropriately placed on the 303(d) List. As a result of this science-based approach, Arizona will be able to focus its resources and efforts on those water bodies truly in need to immediate action.

In particular, we support the Planning List, the Narrative Standards Evaluation, the minimum standards for data quality and representativeness and the weight-of-evidence evaluation provisions in the rule. Not only are these elements of the rule consistent with the NRC recommendations, they will ensure that Arizona reserves full 303(d) listing for those water segments that are truly impaired.

We also supports the rule's delisting procedures that require that delisting be comparable to listing. Further we support the priority ranking provisions that will allow Arizona to identify its highest priority waters and to target TMDL development for those highest priority waters over the next two years.

Response: The Department appreciates the comment.

Comment 5 - 1: The Clean Water Act requires that all states, including Arizona, both establish surface water quality standards and ensure that our waters meet those standards in order to advance the ultimate goal of restoring and maintaining the chemical, physical and biological integrity of the nation's surface waters. Part of this responsibility includes identifying the waters that do not meet those standards, listing those waters as impaired, and taking action to ensure that the waters meet the standards in a timely fashion.

As we indicated during the 2000 Legislative Session, we believe the law -- then HB2610 and now A.R.S. §§ 49-231 through 49-238 – the legislature passed and the governor signed, does not comply with the requirements of the Clean Water Act or its implementing regulations, because it limits the Arizona Department of Environmental Quality's (ADEQ's) ability to consider all of the readily available data and will result in massive de-listing of streams on the 303(d) List based solely on the lack of data.

We believe the Clean Water Act was written so agencies would err on the side of caution or implementing more protection not less. This rule defaults to the least protection and uses scientific uncertainty to not act to protect the state's waters. This will mean more delays in cleaning up Arizona's impaired waters and overall failure to meet the goal of the Clean Water Act.

The Clean Water Act regulations and case law make it clear that the states are required to "assemble and evaluate" all readily available data. See 40 CFR 30.7(b)(5) referenced below. Also according to 40 CFR § 130.2(j), water quality limited segments include those waters that are known or expected to violate water quality standards. Even if there is no data on instream concentrations, a water that is expected to violate standards based on dilution calculations should be listed. If there is limited data that show compliance with standards during non-critical conditions but extrapolation of this limited information indicates that violations would be expected during critical conditions, the water should be listed. Please review the regulations listed below:

40 CFR 130.2 *(Definitions)*

(j) Water quality limited segment. Any segment where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after the application of the technology-based effluent limitations required by sections 301(b) and 306 of the Act.

40 CFR 130.7 *(TMDLs and individual WQBELs)*

(b)(5) Each State shall assemble and evaluate all existing and readily available water quality-related data and information to develop the list…. At a minimum "all existing and readily available water quality-related data and information" includes but is not limited to all of the existing and readily available data and information about the following categories waters: …

(ii) Waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards…

We support these regulations and also support using all of the best available scientific data to determine whether or not a stream or stream segment is impaired. We do not support using lack of resources, unreasonable sampling requirements, or other excuses which result in the massive delisting of streams when there is evidence to suggest their impairment. We believe this rule does just that.

Response: The Department believes that the rulemaking addresses the federal regulations noted by the commenter. The Department acknowledges that the rulemaking requires a more rigorous process for assessment and determining impairment. The Department believes the rules are consistent with recommendations made in the National Academy of Science's National Research Council report to EPA, entitled "Assessing the TMDL Approach to Water Quality Management," encouraging EPA to "endorse statistical approaches to defining all waters, proper monitoring design, data analysis, and impairment assessment." The report also notes that evidence suggest that limited budgets are preventing states from conducting the necessary monitoring to assess the conditions of their waters. EPA is assessing the sufficiency of state resources to conduct adequate monitoring for the assessment and TMDL programs.

R18-11-604(A) states that "[t]he Department shall evaluate, at least every five years, Arizona's surface waters by considering all readily available data (emphasis added). One of the first steps the Department undertakes when developing the assessment is to assemble all existing available data. In addition to data gathered by or for the Department (U.S.G.S. collects data for the Department under contract), staff contacts various agencies, institutions, and groups involved in water quality or environmental efforts to solicit available data and documentation. Staff also accesses EPA's data management systems, such as the STORET database. Once the data are assembled, it must be validated as credible and scientifically defensible, according to R18-11-602 before it can be used in evaluating whether standards and designated uses are being met. All data used or reviewed in the assessment process are included in the water quality assessment, 305(b) Report. If data cannot be used for listing determinations, it is still included in the assessment tables with comments indicating why is was not used.

Water quality segments that are "expected" to violate water quality standards are known as "threatened" waters. Waters are generally determined to be threatened through *trend analysis,* use of dilution calculations, or other predictive models that indicate impairment under a given set of circumstances. These rules specifically refer to the Department performing trend analysis under R18-11-604(D)(2)(e) or water quality modeling under R18-11-603(C) and (D) when evaluating surface waters for impairment. Current federal law and regulations are somewhat ambiguous with regards to threatened waters. As noted by the commenter, federal rules require that states assemble and evaluate all existing and readily available data, including "waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards (40 CFR 130.7((b)(5)(ii))," but section 303(d) of the Clean Water Act is silent on these threatened waters. The *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* suggests that current rules require the Department to include threatened waters on the 303(d) List but as noted above, there is no clear statutory or regulatory authority. The final July, 2000 TMDL rule (now suspended) did not require states to list threatened waters. Given this understandable uncertainty regarding the ultimate fate of threatened waters, the rule provides for placing threatened waters on either the Planning List (R18-11-604(D)(2)(i)) or the 303(d) List (R18-11-604(E)(1)(b)), depending on whether, at the time the Department submits its final list to EPA, federal rules required threatened waters to be listed. The Preamble has been modified to explain the assessment process.

Comment 8 - 1: On page 534 of the preamble, the document listed as item 1, "EPA Requirements for Quality Assurance Project Plans" is listed as an interim final document. What is correct? Is this an interim document or is it a final document? Reasonably it cannot be both.

Response: The Department thanks the commenter for pointing out this conflict. The referred document has been replaced by a final version titled *EPA Requirements for QA Project Plans (QA/R-5)*, EPA/240/B-01/003; March 2001. The Preamble and the Department's web site have been corrected.

Comment 8 - 2: On page 535 of the preamble, "for the 2002 listing cycle, pH is ±0.2 standard units, dissolved oxygen is ±0.2 mg/l, and turbidity is ±2 NTU." These field equipment specifications were not listed in the rule and they should be.

Response: Manufacturer's specifications for field test equipment change over time as the technology improves. If the specifications were placed in the rule, each time there was a change from the manufacturer, the rule would have to be revised. R18-11-603(A)(2) has been changed as follows to specify that the Department will identify the field equipment tolerances observed for each assessment, listing cycle, or TMDL study:

Identify the field equipment specifications used for each listing cycle or TMDL developed. ~~*The Department shall consider that a*~~ *A field sample measurement within the manufacturer's specification for accuracy meets surface water quality standards* ~~*and identifies field equipment specifications used for each listing cycle or TMDL developed*~~.

Comment 8 - 4: On page 3660 of the preamble of the first draft of the state TMDL rule, there was some discussion about how data is handled for ephemeral and intermittent surface waters in terms of when and how many samples must be collected. In the second draft of the rule, this information on data collection was not clear in either the preamble or the rules. It also, was not clear in the rules how an ephemeral waterbody would be listed.

Response: There is no distinction based on waterbody type in this rulemaking Ephemeral waters must meet the same listing criteria as perennial waters. Generally this requires a minimum of 10 samples obtained over three or more sampling events for placement on the Planning List and a minimum of 20 samples obtained over three or more sampling events for placement on the 303(d) List. Both subsections of the rule have provisions for placement on the appropriate list, with fewer than the required number of samples, for certain parameters that have acute toxic impacts or short-term human or aquatic health exposure concerns. The Preamble has been modified to clarify treatment of ephemeral waters.

Comment 8 - 5: On page 542, there is a statement that if listing was based on two successive years of an annual mean standard not being met, the Department will look for at least two successive years of data indicating that the standard is now being met. This also was not clear in the rule and should be further clarified.

Response: The cite referenced (R18-11-604(C)) in R18-11-605(E)(2)(a)(ii) was incorrect. R18-11-605(D) refers to the criteria used for determining whether a surface water is impaired and should be placed on the 303(d) List. The citation proposed in R18-11-605(E)(2)(a)(ii) has been changed to R18-11-605(D).

R18-11-605 allows the re-evaluation of the surface water or segment, using new or additional data, against the same criteria for which it became listed (R18-11-605(D)). To perform this re-evaluation, the data must be of a similar format.

1. The newer data must capture the same critical conditions, for example, climatic or hydrologic, occurring when the initial data (that cause the listing) was collected; or
2. There are a sufficient number of samples to determine that the standard (previously exceeded) is not being exceeded and that the surface water is now attaining its uses, for example:
    a. If an annual mean standard had been exceeded, the newer data must contain a sufficient number of samples to determine an annual mean;
    b. If a surface water was listed based on two exceedances of a toxic criteria within a three-year period, the newer data must contain at least three years of data showing no exceedance of that criteria.

The preamble has been modified to further explain this example.

Comment 7 - 1: We would like to commend ADEQ on the general approach it has taken in the proposed rule, which includes some very innovative and thoughtful ideas (e.g., weight-of-evidence, detailed QA/QC requirements, detailed sampling and analysis plan requirements, etc.) As states around the nation struggle to implement the TMDL program in light of budget constraints and sometimes ambiguous or inconsistent guidance from EPA, they are seeking to develop workable programs that identify waters that are truly impaired and for which the TMDL program can provide the appropriate solution for addressing that impairment (as opposed to, for example, simply enforcing permit limits in

existing NPDES permits). Although we continue to have some concerns and questions with the proposed rule, we believe that the proposal establishes a framework that will help the state achieve these goals.

Response: The Department appreciates the comment.

Comment 7 - 2: We commend ADEQ on the lengthy stakeholder process that preceded proposal of the rules. We feel that our concerns and questions were considered by ADEQ throughout the process, even if they were not always reflected in the various pre-proposal drafts and/or in the proposed rule.

Our remaining concerns with the proposal are documented in greater detail below, following the section that identifies the reasons for our support of many of the core components of the proposal. One of our concern is that ADEQ has left itself several "outs" from those portions of the rules that implement the statutory provisions requiring that listings and TMDL decisions be based on adequate and sound data. (See comment 7-15). We recognize the need for ADEQ to retain some discretion in the rules and the listing process, but feel that in some cases the proposal goes too far in providing discretion at the risk of certainty and clarity in the rules.

Response: The Department appreciates the comment.

Comment 7 - 15: The previous proposed version of this rule required ADEQ to use clean sampling techniques for certain actions. This provision has been deleted form this proposal. It should be reinstated.

In the 1990s, EPA developed a series of methods designed to allow accurate measurements of trace metals levels in the surface water quality standards and related programs (e.g., NPDES, TMDL). Development of such mechanisms was necessary because water quality standards for many metals were being set at very low levels, often at or near the ability of then-existing methods to measure accurately. In addition, EPA discovered that contamination often occurred during sample collection, such that trace amounts of metals were allowed to contaminate samples. Because standards were so low, this trace contamination could result in false positives when assessing compliance.

The methods EPA developed covered both sample collection (Method 1669) and sample analysis (the 1600 series of methods). These methods are recognized in 40 C.F.R. Part 136, and therefore satisfy the definition of credible and scientifically defensible data contained in proposed R18-11-601(3)(d), such as the methods are generally accepted and validated.

The need to use Method 1669 for sample collection is made evident from the language EPA includes in the text of that method. For example, EPA states:

EPA found that one of the greatest difficulties in measuring pollutants at these (water quality criteria) levels was precluding sample contamination during collection, transport, and analysis. (p. iii)

The ease of contaminating ambient water samples with the metal(s) of interest and interfering substances cannot be overemphasized. (p. 1)

Other EPA documents also reference the importance of clean sampling. For example, EPA 823-B-96-007 (*The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit From a Dissolved Criterion*) states (p. 16):

The sampling procedures for metals that have been that have been used routinely over the years have recently come into question in the academic and regulatory communities because the concentrations of metals that have been entered in some databases have been shown to be the result of contamination....

[Method 1669] describes the apparatus, techniques, and quality control necessary to assure reliable sampling.

Note that recent studies conducted by the U.S. Geological Society...indicate that great bias can be introduced into dissolved metals determinations by filtration artifracts.

Method 1669 was developed for situations where trace levels of metals were being tested for. That is precisely the type of monitoring done in the TMDL program: ambient water quality monitoring to assess attainment of very low water quality standards. Included as Attachment 8 is Appendix E to EPA 823-B-96-007 (cited above), which outlines the differences between clean and non-clean techniques for sample collection. That brief document highlights possible areas where sample contamination can occur.

We do not object if data collected through other than clean sampling or analytical methods is used to place waters on the Planning List. However, because placement on the 303(d) List carries with it certain impacts, clean methods should be used for placement on that list and for other TMDL decisions.

For metals, requiring use of clean sampling and analytical techniques, such as the Method 1669 for sample collection, the 1600 series methods for analysis, in listing decisions as well as TMDL development is necessary to comply with the statutory mandate to use only credible and scientifically defensible data. Use of clean sampling and analytical techniques is necessary in order to comply with the statutory requirements to use appropriate QA/QC measures and reflect water quality conditions at the time of sampling (see A.R.S. § 49-232(B)(1)-(2)), rather than outside contamination.

The requirement to use clean techniques should be placed somewhere in R18-11-602 (credible data), or perhaps in R18-11-603 (general data interpretation). It should not be placed in the weight-of-evidence Section; clean techniques should be required for metals, not simply weighted more heavily than non-clean techniques.

Response: The Department agrees that clean sampling collection and analysis techniques are appropriate in certain situations and believes the requirements under R18-11-602 related to developing a QAP and SAP are sufficient to cover those situations. The Department does not agree that clean sampling techniques are necessary for all metals sampling and analysis nor should cleans sampling techniques be required on all waters and reserves the ability to make that determination on a project specific basis. No change has been made to the rule.

Comment 7 - 29: The NRC report (pp. 90-92) provides in pertinent part as follows:

Water quality standards are the benchmark for establishing whether a waterbody is impaired; if the standards are flawed (as many are), all subsequent steps in the TMDL process will be affected. Although there is a need to make designated use and criteria decisions on a waterbody and watershed-specific basis, most states have adopted highly general use designations commensurate with the federal statutory definitions. However, an appropriate water quality standard must be defined before a TMDL is developed. Within the framework of the Clean Water Act (CWA), there is an opportunity for such analysis, termed use attainability analysis (UAA) (an alternative to a full-blown UAA is the adoption of site-specific standards).

A UAA determines if impairment is caused by natural contaminants, nonremovable physical conditions, legacy pollutants, or natural conditions. More importantly, a UAA can refine the water quality standard....

In the 1990s, TMDLs were undertaken for some waterbodies where the designated use was not attainable for reasons that could have been disposed of by a UAA. For example, TMDLs conducted in Louisiana resulted in the conclusion that even implementing zero discharge of a pollutant would not bring attainment of water quality standards. A properly conducted UAA would have revealed the true problem—naturally low dissolved oxygen concentrations—before the time and money were spent to develop the TMDL....

(emphasis in original)

Listing a water based on the failure to satisfy the default water quality standards applicable to certain general waterbody categories in Arizona can often result in the problems identified in the language from the NRC report cited above. For example, if naturally-occurring conditions or legacy pollutants alone would result in a violation of the applicable water quality standard, there would simply be no way that the adoption or implementation of a TMDL would ever bring about attainment of the water quality standards. This is especially true in Arizona, given the presence of numerous natural mineralized zones that contribute runoff or other water sources to surface waters in Arizona. In addition, many other states, such as Colorado (see 5 CCR 1002-31 § 31.7), routinely develop site-specific standards (based on existing ambient concentrations, water effects ratios, recalculation procedures, or other site-specific analyses) prior to moving forward with listing decisions or any TMDL development efforts especially in situations where impairment is due to natural background conditions and/or legacy pollutants.

For these reasons, we request that ADEQ expressly recognize in the preamble or rule the importance of ensuring that appropriate water quality standards have been adopted for each waterbody prior to including it on the impaired water (i.e., 303(d)) list. ADEQ should use site-specific standards where appropriate to ensure the application of appropriate water quality standards. As these site-specific standards are developed to account for natural sources or other similar factors, the waters would then need to be reassessed to determine whether they meet the new standards.

Response: The Department agrees that it is important that the water quality standards and the designated uses assigned to a surface water are appropriate for the waterbody. The Department also agrees that conducting a use attainability analysis (UAA) and/or developing site-specific standards are two methods for correction in these situations. While the Department can and does support these goals, it will not always be known before the listing if either the standards or the designated uses are incorrect. In these situations, targeted monitoring of a waterbody while on the Planning List or during the development of a TMDL for a waterbody on the 303(d) List will discover the need to develop either a UAA or site-specific standard. The Preamble has been updated to further clarify this issue. No change has been made to the rule.

Comment 6 - 9: ADEQ has expanded the Rule beyond the scope stated in the Preamble to the Rule. The Preamble to the Rule establishes the scope by stating, "This rulemaking establishes a new Article dealing with the process and methodology required under A.R.S. § 49-232(C) for identifying impaired surface waters." The clear intent of the Rule is to establish procedures for *identifying* impaired waters. It is not to be used for other purposes such as establishing procedures to be used in developing TMDLs or in conducting trend analyses. Neither TMDL development nor trend analyses have anything to do with identifying, listing or prioritizing impaired waters. ADEQ stated at the September 25, 2001 Public Hearing in Phoenix that the state statutes say to use this rulemaking for TMDL development. This is not correct. In regard to TMDL implementation plans the statutes mention that data need to meet the "quality control and quality assurance requirements of § 49-232" and that TMDLs "Be based on data and methodologies that comply with § 49-232." (§ 49-234.C.1). These requirements are reasonable and logical for TMDL development but they don't support the inclusion of TMDL development language in this rulemaking. We recommend that all references to trend analyses and TMDL development be stricken from this rulemaking and included in a separate future

TMDL rule. We also recommend that Item 5 of the Preamble clarify that TMDL development will be addressed in a future rule.

Response: The Department disagrees with the commenter. Trend analysis is a recognized statistical tool for detecting, estimating, and predicting spatial and temporal patterns in environmental data. Provided that a sufficient amount of data exist to perform the investigation, trend analysis can be an important component of both the water quality assessment and listing process. Trend analysis is used as a screening tool in cases where there are strong linear trends or for more complicated estimation and detection efforts. 40 CFR 130.7(b)(5)(ii) requires states, when developing their list of impaired waters, to include "waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards." These surface waters are considered "threatened waters" and would be placed on either the Planning List or the 303(d) List, depending on federal requirements at that time (see response to Comment 5 - 1). Similarly, trend analysis or predictive modeling is used in the development of TMDLs to ensure during critical conditions that water quality standards are being maintained.

The Department disagrees that it is inappropriate to include TMDL development language in the rule. As the commenter notes, A.R.S. § 49-134(C) requires that each TMDL be based on: 1) data and methodologies that comply with the credible data requirements; and 2) statistical and modeling techniques that are properly validated and broadly accepted by the scientific community. A.R.S. § 49-234(B) states that "[t]he department may establish the statistical and modeling techniques in rules adopted pursuant to § 49-232, subsection C." Since the statute clearly provides for the statistical and modeling methodologies for TMDL development to be adopted within the impaired waters identification rule, it is certainly logical to clarify those other portions of the rule that would also apply not only to the identification of impaired waters but also to the development of the TMDL. Sections of the rulemaking that applies to both actions, include development of a QAP and SAP, evaluation of the data to ensure that it is credible, and evaluation of data to determine whether it meets water quality standards. No change has been made to the rule.

R18-11-601. Definitions

Comment 2 - 1: R18-11-604(A)(1) and R18-11-605(A)(6) predicate that impaired water listings and other TMDL decisions will not be made when "the exceedance is due solely to pollutant loadings from naturally occurring conditions." R18-11-601(9) defines a "naturally occurring condition" as "the condition of a surface water in the absence of human-induced alterations, which is based on the best scientific information available." This definition explicitly excludes all man-made urban lakes, as the initial construction of this type of waterbodies is, in itself, a human-induced alteration. This also excludes all waterbodies, man-made or natural, which are subject to any human influence, even if such an influence is designed to prevent or minimize an exceedance of a numeric or narrative surface water standard. As a result, it is unlikely that this provision would apply to any Arizona surface water.

For example, if an urban lake is managed by a municipality using best management practices to control vectors or excessive algae growth, such a waterbody undergoes "human induced alterations" for the better. These alterations, however, could exclude the waterbody from the "naturally occurring conditions" provision of the rule and result in impaired waterbodies listing for natural water quality fluctuations that are actually minimized by human-induced alterations. In short, human activity designed to improve water quality should not, in itself, exclude a surface water from the "naturally occurring conditions" provision. This potentially self-defeating language could be resolved using the following definition:

"Naturally occurring condition" means the condition of a surface water or segment that would have occurred in the absence of pollutant loadings resulting from human activity."

The use of this definition would ensure that the provision would not apply when human influence causes or contributes to an exceedance of a water quality standard, but would not exclude man-made waterbodies or human-managed waterbodies from the provision.

Response: The Department agrees that the suggested language is clearer than that originally proposed. R18-11-101(9). This subsection has been renumbered and modified as follows:

10. *Naturally occurring condition" means the condition of a surface water or segment* ~~in the absence of~~ that would have occurred in the absence of absent pollutant loadings as a result of *human* ~~induced alterations~~ activity ~~based on the best scientific information available.~~

The Department disagrees with the commenter on the interpretation of the naturally occurring language. The fact that municipal park lakes and urban impoundments are "man-made" does not, by itself, exclude these structures from using the naturally occurring conditions language, where appropriate. Many of these impoundments have been created in waters of the United States or are considered waters of the United States based on other factors. They are required to meet surface water quality standards based on their designated uses as there are no provisions in the surface water quality standards for "natural water quality fluctuations."

The surface water quality standards contain a provision in R18-11-117 that allows the physical and mechanical maintenance of canals, drains, and municipal park lakes that includes dredging, dewatering, and the physical, chemical, and biological control of weeds and algae. In the same Section, there is a provision for temporary increases in turbidity as a result of these maintenance activities. Given these provisions in the surface water quality standards, the

Department does not believe that there is merit in duplicating this coverage in the impaired waters rule. This provision grants municipalities the latitude to actively manage these facilities to maintain water quality necessary to achieve the standards. If the surface water cannot maintain standards, it may be identified as impaired. As surface waters, municipal park lakes, canals, and drains are also eligible for moderating provisions in the standards, such as use attainability analyses or development of site-specific standards where research shows that the criteria and/or designated uses are inappropriate for the waterbody. The Department is currently developing a lakes classification system as part of its nutrient criteria development. Municipal park lakes and urban impoundments may, as a result of this work, have separate use designations and standards in the future.

Comment 5 - 2: Overall it is not the definitions but the application of the definitions for which we question this rule. Science does not prove, but rather disproves. Because the scientific method will always leave some doubt, the ADEQ should not use it to abdicate its responsibilities per the Clean Water Act and instead should err on the side of more protection for the state's resources.

Response: This rulemaking is a major shift in how Arizona conducts its assessment and listing processes. This rulemaking will provide the necessary guidance, criteria, and science-based decision to ensure that waters placed on the 303(d) List are truly impaired and that a TMDL analysis should be conducted. The rules were terminated and re-proposed in January, 2002 to include concepts from EPA's guidance on the consolidated assessment an listing process, *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*. The Department believes that the two-list concept established in this rulemaking will make the assessment and listing process an easy process for the public to understand and follow. The Planning List is a tiered list with various categories of waters, including those where a TMDL has been developed and the effectiveness monitoring has yet to be collected; where there is some monitoring data but an insufficient amount for assessment; or where the existing data doesn't meet the credible data requirements. The public will be able to track the progression of a waterbody from assessment to one of three options: (1) fully attaining; (2) Planning List for future evaluation; or (3) the 303(d) List. Once on the Planning List, a surface water will be tracked from one tier to another as additional data are gathered and assessments are refined. The 303(d) List will contain those waters that have been identified as impaired and for which a TMDL must be developed.

To address this major shift, the Department is creating a targeted monitoring team to examine those waters on the Planning List. In support of the new rules, the ambient monitoring programs are also re-focusing their efforts over the next few years to concentrate on waters where additional data are needed. The ambient team will continue to implement its monitoring program on a watershed basis but will select those waters where there are data gaps or where little or no data have been gathered. By prioritizing the waters on the Planning List, the Department intends to revisit many of the waters from the 1998 303(d) List that do not meet the criteria of the new rules within the next watershed rotation cycle and address the balance of the 2002 Planning List within two watershed rotation cycles. No change has been made to the rule.

Comment 8 - 6: Subsection (3)(c) includes the statement "…based on the nature of the water in question…" This statement is unclear and requires further clarification in the rule. This may be relating to differences between ephemeral, intermittent and perhaps perennial waters, but the distinction/clarification in the rule is unclear.

Comment 8 - 7: Subsection (3)(d) includes the statement "…statistical, and modeling methods that are generally accepted and validated…" The use of the word "generally" is vague and not appropriate. The word "generally" should be deleted.

Response: The language under subsection (3)(c) is one of four criteria listed in A.R.S. § 49-232(B) required for data to be considered "credible and scientifically defensible." The definition of "credible data" was discussed at length in stakeholder meetings. The final consensus was to use the statutory language in the rule.

Stakeholders agreed that the four criteria, as written in the statute, should be used as the definition of "credible data." The Preamble has been modified to further clarify the meaning of the phrase "based on the nature of the water in question."

Comment 6 - 8: We believe ADEQ has overstepped the authority of the Clean Water Act by adding to the Federal statutory definition of "Pollutant." The new language states "Characteristics of water, such as dissolved oxygen, pH, temperature, turbidity, and suspended sediment are considered pollutants if they result or may result in the non-attainment of a water quality standard." The new language is so vague it could include flow which clearly is beyond the scope of the CWA. Of these characteristics, only suspended sediment could be considered a pollutant under the Federal definition. In the Preamble, ADEQ casually states that EPA as in agreement with listing waters based on water quality characteristics but does not provide a cite for this agreement. We are not aware of any language in either the Clean Water Act or EPA's Regulations that supports the declaration of water quality characteristics as pollutants. We remind ADEQ that state statutes direct ADEQ to follow "33 United States Code § 1313(d) and the regulations implementing that statute." Any reliance upon EPA guidance is outside the authority granted by A.R.S. § 49-231 through § 49-238.

We believe that ADEQ is trying to contort the Rule so that all the state's water quality problems will fit under one programmatic umbrella. This was never the intent of the CWA nor the Environmental Quality Act. This is most

clearly evidenced by ADEQ's intent to list waters that are impaired due to a ***non-pollutant***. Listing waters impaired due to a non-pollutant is inconsistent with the Clean Water Act and EPA Regulations in that it does not adhere to the plain language of CWA § 303(d)(1)(C) which requires states to establish TMDLs only for those pollutants identified under § 304(a)(2) as "suitable for such calculation." We can only assume that ADEQ is including non-pollutants in the Rule as a back-door mechanism to control pollutants for which there are no water quality standards. For example, a water may be listed as impaired because the dissolved oxygen standard has been exceeded. However, dissolved oxygen is not a pollutant and, therefore, a TMDL cannot be calculated. A pollutant such as nitrogen may be associated with the dissolved oxygen exceedances. Because the water is listed, ADEQ may now proceed to control the nitrogen in the water. We urge ADEQ to develop their TMDL program within the boundaries of the CWA. All references to non-pollutants (stressors, pH, dissolved oxygen, etc.) should be stricken from the Rule because it is not possible to establish TMDLs for characteristics.

Response: The Department disagrees with the commenter. The commenter contends that since the federal definition of the term "pollutant" doesn't include flow, toxicity, dissolved oxygen, and pH, waters cannot be listed, nor a TMDL developed, for these ecological characteristics. The Department believes that the commenter has misinterpreted the breadth of the term "pollutant" and the breadth of factors that may be considered when listing waters under section 303(d)(1)(A) of the Clean Water Act.

Court decisions and EPA interpretations routinely recognize several of these ecological characteristics as "pollutants" in the context of the Clean Water Act. 40 CFR 401.16 includes biochemical oxygen demand and pH in the list of "conventional pollutants" designated under section 304(a)(4) of the Clean Water Act. The list of federal cases and administrative interpretations supporting the broader definition of pollutant is lengthy and include: Piney Run Preservation Ass'n v. County Com'rs of Carroll County, 268 F.3d 255 (4th Cir, 2001) (dissolved oxygen); EPA, Notice of Proposed Rule, NPDES Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations, 66 FR28960, 3032 (Jan. 12, 2001) (dissolved oxygen); Re: Advanced Electronics, Inc., 2000 WL April 10, 2002§ 49-232(B).

When implementing section 303(d)(1)(A), the factors to be considered are not limited to "pollutants." Specifically, the new EPA guidance *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*, discusses listing of waters "if the impairment is not caused by a pollutant."

The commenter contends that a TMDL cannot be written for characteristics, such as toxicity of pH. The Department disagrees. A waterbody receives discharges of materials that are indisputably pollutants, for example, a pesticide, acid, or fertilizer, and, as a result, the water quality standard related to toxicity, pH, or dissolved oxygen are violated. TMDLs have, in fact, been prepared for toxicity, pH, and dissolved oxygen. 40 CFR 130.12(i) states that "TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measures." (emphasis added) No change has been made to the rule.

Comment 8 - 8: Subsection (18). The concept of "Temporally independent samples" should also address seasonal differences. Temporally should not be restricted to simply more than seven days apart. Due to the unique character of storms in this region, rain storms in the summer are usually of a shorter duration and more frequent than those of the longer duration storm events in the winter. The definition does not take into account seasonal variation in samples, whereas it should.

Response: The concept of seasonal distribution of samples is important in assessing whether a surface water is attaining all of its designated uses. Determining whether a waterbody is impaired is a different test. Impairment may be, and often is, either seasonal or triggered during critical events. The Department deals with the concept of "critical conditions" in the weight-of-evidence subsection under R18-11-605(B)(1)(a). No change has been made to the rule.

Comment 7 - 18: Subsection (19). Assuming that the threatened water concept has significance in future lists (see above comment), We recommend two changes to the proposed definition.

First, the determination of threatened status should be based on "reasonably current" credible and scientifically defensible data (that phrase should be included in the definition). It would be inconsistent to make impairment decisions only using reasonably current data, but to base decisions on threatened status on a different universe of data. (As noted below, ADEQ's concept of reasonably current data allows for older data to be used in trend analysis, which could be useful for determining threatened status.)

Second a water should be listed as threatened if it is "reasonably likely" to be impaired by the next listing cycle, not just if it "may be" impaired. The "may be" standard is vague but would appear to allow listing if there is any possibility of exceeding standards at the next listing cycle. Even the EPA *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* (p. 5) suggests that non-attainment should be "predicted" in accordance with the state's methodology in order for a water to be threatened, which implies objective modeling that demonstrates the likelihood of non-attainment.

Response: While the Department supports the concept, we believe that adding "reasonably current" to the definition of threatened waters will add confusion. The definition requires the use of credible and scientifically defensible data,

however, trend analyses generally requires a significant amount of data, for example 15-20 years of data. Adding the term "reasonably current" would result in the Department having to document and explain every time why data older than five to seven years was used in an assessment or listing decision. In some earlier drafts of the impaired water identification rule, the Department included language that required data to be collected within the last five years before listing to be considered as reasonably current in accordance with A.R.S. § 49-232(B). In the final rule, however, the Department has simply referenced the statutory language in R18-11-605(A) that data must be "reasonably current," rather than defining the term.

The Department finds that "reasonably" and "likely" are synonymous but agrees that the addition of "likely" to the definition of "threatened" helps to clarify the intent. Subsection (19) has been revised as follows:

"Threatened" means that a surface water or segment is currently attaining its designated use, however, trend analysis based on credible and scientifically defensible data indicates that the surface water or segment ~~may~~ is likely to be impaired before the next listing cycle.

R18-11-602. Credible Data

Comment 4 - 3: If Arizona intends to collect data and report data for the purpose of fulfilling federal obligations described in section 305(b) and 303(d) of the Clean Water Act, the state is required to comply with EPA Order #5360.1-A2. The order requires EPA and states to establish formal data quality objectives (DQOs) prior to collecting or using any data to make regulatory decisions.

The state of Arizona correctly recognizes the need to develop and adopt DQOs.[1] However, the state illegally delegates their responsibility to the "monitoring entity."[2]

It is not possible for any monitoring entity to develop their own DQOs unless the state first describes the specific level of data quality needed to ensure that the information is "suitable for its intended purpose." The determination of suitability can only be made by the regulating authority and it must be defined in advance of all data collection. The state must also develop and adopt formal Data Acceptance Criteria (DAC) so that the monitoring entity can demonstrate compliance with the DQOs. The state of Arizona must define the level of data quality (accuracy, precision, representativeness, QA/QC requirements, etc.) needed to determine that a beneficial use is "impaired" by water quality. Equally important, the state must define the level of data quality needed to determine that measured water quality "fully protects" the designated beneficial uses." Such definitions must be quantitative in nature if the state intends to rely on quantitative data or statistical analyses to add or remove water bodies from the 305(b) or 303(d) lists. The state should also define under what circumstances and conditions data quality will be insufficient or unacceptable for making regulatory determinations.

The state has developed a document entitled "Guidelines and Specifications for Preparing a Quality Assurance Plan, April 26, 2001." However, this document is marked "draft" and therefore cannot be relied upon as official agency guidance. This same problem also applies to the state's narrative toxicity, nutrient, and bottom deposits standards implementation guidelines which are "draft" documents and have not been duly promulgated as rule, as required by the Arizona Administrative Procedures Act A.R.S. § 41-1001(17).

A priori threshold decision criteria are essential in the context of a strict liability statute, such as the Clean Water Act, where regulated entities are often required to "prove the negative" in order to demonstrate compliance. Given the critical importance scientific data plays in demonstrating regulatory compliance, the state of Arizona lacks legal discretion to waive, defer or delegate its authority or obligation to develop and adopt formal DQOs and DAC.

EPA recently published many new documents describing the specific obligations the state has to develop a quality assurance and quality control (QA/QC) program for all data used to implement federal regulations. Only one of these documents was cited; and it was an obsolete version.[3]

Arizona's proposal for documenting "Credible Data"[4] and defining "General Data Interpretation Requirements"[5] fails to comply with the mandatory requirements set forth in the following EPA documents:

1) EPA Policy and Program Requirements for the Mandatory Agency-wide Quality System, EPA Order 5360.1 A2 (May, 2000)
2) EPA Quality Manual for Environmental Programs

   EPA Manual 5360 A1 (May, 2000)
3) EPA Requirements for Quality Management Plans (QA/R-2)

   EPA/240/B-01/002; March, 2001
4) EPA Requirements for QA Project Plans (QA/R-5),

   EPA/240/B-01/003; March, 2001
5) Guidance for the Data Quality Objectives Process (G-4)

   EPA/600/R-96/055; Aug., 2000

6) Guidance for Data Quality Assessment: Practical Methods for Data Analysis (G-9)

   EPA/600/R-96/084; July, 2000

7) Guidance for Developing a Training Program for Quality Systems (G-10)

   EPA/240/B-00/004; December, 2000

8) Guidance for Choosing a Sampling Design for Environmental Data Collection (QA/G-5S)

   Peer Review Draft dated August, 2000

9) Guidance on Environmental Data Verification and Validation (G-8)

   Peer Review Draft dated June, 2001

10) EPA Memorandum to Assistant Administrators and Regional Administrators

    Entitled: "Clarification of Terminology for the EPA Quality System" Authored and signed by Norine E. Noonan, Asst. Administrator, ORD, Dated: March 2, 1999.

The state has also failed to demonstrate compliance with the federal Office of Management and Budget's new regulations "to ensure and maximize the quality, objectivity, utility, and integrity of information disseminated by federal agencies." To the extent Arizona, acting through EPA's delegated authority, intends to rely on certain data to regulate under the Clean Water Act, they must comply with the guidelines OMB promulgated in June, 2001.[6]

Response: The EPA order referenced by the commenter is an internal policy document that applies only to EPA and, in some cases, entities doing certain types of data collection and analysis on behalf of EPA. The Clean Water Act requires each state to develop and submit section 305(b) Reports and section 303(d) Lists. The authority to develop these reports and lists submittals is not delegated to the state by EPA (like some other programs including NPDES permitting program), it is a statutory requirement of the state. The Department is not developing the 305(b) Report and the 303(d) List for EPA. The Department is doing it because the Clean Water Act requires the state to do it. Therefore, the provisions of Order #5360.1-A2 do not apply to the Department's preparation of 305(b) and 303(d) submittals.

When state data collection efforts are supported by federal grant funds, the state must prepare, and EPA must approve, a quality assurance project plan under 40 CFR 35. The EPA Quality Manual for Environmental Programs states that "extramural (non-EPA) quality systems that provide objective evidence (such as a Quality Management Plan, quality manual, or audit report acceptable to EPA) of complying fully with the specifications of ANSI/ASQC E4-1994 are in compliance with EPA policy" (Manual #5360.1-A2, May 5, 2000, P. 1-4). The Department has prepared all quality assurance/quality control plans required under 40 CFR 35 and is in full compliance with all federal quality assurance requirements. In the course of stakeholder discussions, the consensus was that the requirements of EPA's quality assurance project plans, as outlined in EPA Requirements for QA Project Plans (QA/R-5), EPA/240/B-01/003; March, 2001, were the core requirements of a sound quality assurance/quality control program. The commenter is correct that the Department developed a draft document entitled Guidelines and Specifications for Preparing a Quality Assurance Plan, April 26, 2001 as an example QAPP because the federal manual referenced above is neither user friendly nor intuitive. It is only an example and does not replace the quality assurance/quality control requirements of this rulemaking. These requirements are spelled out in detail in R18-11-602 and form the basis on which the Department will evaluate the adequacy of QAPs and SAPs submitted by monitoring entities, including documentation regarding representativeness of samples, and use of proper field collection and laboratory methods. R18-11-603 provides data interpretation requirements and additional circumstances and conditions (other than quality assurance/quality control) for which data would be considered insufficient or unacceptable for making regulatory decisions.

One of the requirements of this rulemaking is the discussion of the data quality objectives (DQOs) for the data collection being done by the monitoring entity. This rulemaking most dramatically affects the Department because the Department must comply with all aspects of the rule including development of QAPs and SAPs. Water quality data are collected by numerous entities, organizations and private citizens for a variety of reasons. As noted in previous responses, it is wholly inappropriate and impractical to suggest that the Department develop DQOs for all monitoring entities throughout the state and possibly beyond state boundaries. However, since the Department will be conducting the water quality assessment using data from other monitoring entities, it is appropriate to establish the criteria to ensure use of credible and scientifically defensible data. The rule defines the general data interpretation criteria used in evaluating the data. The Department is unaware of any federal requirements that dictate how states will evaluate data. To the contrary, recognizing that methodologies change over time, particularly as new technologies become available, states are required, under 40 CFR 130.7(b)(vi), to submit the methodology and documentation used to develop the 303(d) List with each submission.

The commenter contends that the Department has not demonstrated compliance with the federal OMB's *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies* (Sept 24, 2001), as noted above, this comment is based on an incorrect assumption that these guidelines apply to non-federal agencies. The OMB guidelines address information disseminated by federal agencies and do not

apply to the state of Arizona. As discussed above, the Department is acting according to the specific requirements of the Clean Water Act and not according to EPA's delegated authority. No change has been made to the rule.

Comment 4 - 4: Subsections (A)(1), (A)(2)(b), (A)(4). We commend ADEQ for including rule provisions that require monitoring entities to use Quality Assurance Plans and Sample Analysis Plans when collecting data that may be used in a listing decision. This will help to assure that the data collected is relevant to the type of sampling being conducted. This will also help in providing for data comparability between different monitoring entities and sites.

However, we are concerned that the proposed rules at R18-11-602(A)(1)(d)(vii) do not provide for a minimum set of qualifications or experience for those individuals who will be conducting sampling. The rules also do not provide for a mechanism for ADEQ or other interested parties to perform field checks of actual sampling efforts being conducted by non-ADEQ personnel.

We, and other water discharge permittees are required to meet stringent discharge conditions, have state-certified staff, and are subject to potentially large fines and or imprisonment for permit related violations. Volunteer environmental monitoring staff are not subject to these same types of limitations and conditions. The preamble to this rule correctly notes that "One of the most difficult issues facing volunteer environmental monitoring programs, in particular, is data credibility." Unfortunately, this proposed rule indicates that ADEQ staff believe that all that is needed to assure data credibility is to provide general guidance on minimum elements to be included within a Sample Analysis Plan (SAP) and a Quality Assurance Plan (QAP). Unfortunately, as discussed above ADEQ has adopted neither formal guidelines for preparing a Quality Assurance Plan or formal guidelines for Data Acceptance Criteria. In reality, the guidelines along with training and experience of sampling staff is crucial to a successful sampling operation. Because development of an adequate SAP and QAP does not guarantee the proper collection, preservation, and transportation of samples, we believe language should be added to these proposed rules that make provisions for notification to ADEQ and other interested parties concerning when, where, and how a monitoring entity plans to collect samples on a waterbody. This would allow oversight by ADEQ staff of a sampling event or provide for a split sampling opportunity by other interested parties. This will greatly add to the credibility of data being collected, since this data is so important to the weight-of-evidence evaluation for a listing decision. This is particularly true in light of the proposed small number of samples required for a consideration of impairment by the Department. We propose that the following language be added to the rules at R18-11-602.

"The monitoring entity, prior to collection of ambient surface water quality samples, shall notify federal and Arizona water discharge permit holders (wastewater, stormwater, and reclaimed water) discharging to the waterbody to be sampled, and to other interested parties that have requested notification, including the Arizona Department of Environmental Quality (ADEQ). A notification of intent to sample shall occur at least 30 days prior to actual sample collection and indicate, to the extent possible, the date and time that the samples are to be collected. The notification shall also include the location where samples are to be collected as well as the full range of analytical and field parameter constituents to be investigated. For notification purposes, ADEQ shall maintain a list of permittees and other interested parties that have requested notification in relation to certain water bodies."

Response: 40 CFR 130.7 requires the Department to assemble and evaluate all existing and readily available data. This includes data from other agencies, permittees, volunteer organizations, and other entities. It would be an impossible and inappropriate task for the Department to oversee all water quality monitoring carried out throughout the state. Water quality monitoring is conducted for a variety of purposes. The data quality objectives (DQO) for the water quality monitoring should be developed by the entity taking the samples. The requirements of this rule clearly impact the Department, but only impacts other entities should they chose to share their data with the Department. Should an entity choose to submit its data for use in either the assessment or listing processes, the DQOs would have to be submitted as part of the QAP or SAP. Like DQOs, qualifications vary widely depending on the type of water quality monitoring conducted or the type of data collected. After lengthy discussions with stakeholders, it was decided to require the monitoring entity to state the minimum qualifications necessary to conduct the type of sampling and document in their QAP or SAP how these requirements will be met within the monitoring entity's sampling program.

With respect to keeping a list of interested parties, the Department does not have the resources to maintain a list of over 100,000 miles of streams and washes, not including lakes and reservoirs, in the state. In addition, while the Department collaborates with other agencies, neither state nor federal agencies are required to notify the Department before monitoring. The language proposed by the commenter would require a 30-day notice before sampling. This would effectively preclude collection of any wet weather, unexpected, or unusual events throughout the state. As storm events often produce the "critical conditions" resulting in impairment, any rule language that effectively excludes this sampling would likely be challenged by EPA. No change has been made to the rule.

Comment 7 - 4: Subsections (A)(1) and (A)(2). The QAP and SAP requirements (proposed R18-11-602(A)(1)-(2)) are one of the most essential portions of the proposal. High quality data is essential to make informed and effective TMDL decisions.

It is important to note that the proposal does not preclude ADEQ from evaluating all readily available data, as required by 40 C.F.R. § 130.7(b)(5). In fact, proposed R18-11-604(A) specifically states that ADEQ will consider all readily available data. All the proposal does is state that data not meeting certain minimum quality assurance requirements cannot serve as the basis for listing because the data is of suspect quality. It is simply sound science and good sense to make TMDL decisions based only on data that can be shown to be reliable.

Moreover, ADEQ's proposal is consistent with both current EPA requirements and the approach being taken in other states. As noted in the preamble, for example, EPA's most recent CALM guidance repeatedly stresses the need to use quality data in making TMDL decisions. See 8 A.A.R. 533-34. This approach is also consistent with current EPA rules. EPA requires states to assemble and evaluate readily available data, see 40 C.F.R. 130.7(b)(5), but does not state that all such data must be considered reliable. In fact, 40 C.F.R. 130.7(b)(6) clearly indicates that states can decide not to use certain data.[25] Finally, EPA's November 19, 2001 TMDL listing guidance, entitled *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* (hereinafter referred to as the "2002 EPA Listing Guidance") includes in category 3 (waters where no TMDL is required) those waters where there is insufficient data that is "consistent with the terms of the state's or territory's assessment and listing methodology" (p. 6). Such an approach would be unnecessary if all readily available data must be accepted and used for listing decisions.

Minimum quality assurance requirements also have been utilized in other states. Florida's rule, which has been approved by EPA, contains many provisions similar to those contained in the Arizona rule. See F.A.C. § 62-303.320(7) (QA/QC requirements). In addition to Florida, quality assurance (credible data) requirements also are part of the TMDL methodologies used in other states, including but not limited to Colorado (Attachment 4, at 1 ("... it is important that data used in assessment decisions be demonstrably credible"; state will review data to see if it complies with "required sampling, analytical and interpretive protocols")); Texas (Attachment 3, at 3 ("... the TNRCC normally requires that data used for the development of the report and draft list be collected under a TNRCC-approved quality assurance project plan"); Nebraska (Attachment 5,[26] at 10 ("Due to the implications of being listed, the Department desires to only consider the highest quality of data feasible"; quality assurance documentation must accompany samples)); and North Carolina (Attachment 6,[27] at 6 (readily available data will be collected, then "data meeting (Division of Water Quality) quality assurance objectives are used in making use support determinations.")).

In light of this precedent, ADEQ is justified in imposing minimum data quality requirements, and in using data not meeting these minimum confidence levels to place waters on the Planning List but not the impaired waters list. See proposed R18-11-604(D)(2)(c). The reasonableness of ADEQ's general approach on quality assurance is discussed further in Attachment 1.

As explained below, however, we remain concerned with ADEQ's ability to waive compliance with any of the QAP or SAP requirements (see comment 7-12 below). We believe some elements are so critical to the integrity of sample collection that they should always be required.

Response: The Department appreciates the comment.

Comment 7 - 12: Subsections (A)(1) and (B)(1). We continue to have concerns with ADEQ's ability to accept future data not meeting any or all QAP or SAP elements outlined in the proposal. See proposed R18-11-602(A)(1) and (B)(1). Although we agree that some of the required elements do not related directly to the quality of the data (e.g., the requirement to have a health and safety plan), many of these requirements are directly related to the quality of the data. We believe that on a prospective basis,[28] some of the requirements are so fundamental to data quality that they should never be excluded, at least in regard to most chemical monitoring.

If data quality requirements are set forth clearly in the rule, it should not be difficult for monitoring entities to comply with the requirements. In fact, an argument can be made that it is easier to comply if mandatory minimum elements are set out that must be complied with in every case, as opposed to presumptive elements that can be waived at ADEQ's discretion. Certainly the ability to waive requirements is likely to result in more ADEQ staff time being spent in reviewing requests to consider data that does not meet the minimum data elements.

The proposed quality assurance requirements are not significantly different than those typically followed under environmental (including Clean Water Act) sampling programs today. ADEQ is not imposing stringent new requirements that monitoring entities will have to scramble to meet, or that will require changes in normal sampling protocols.

As a consequence, we have the following comments:

(a) ADEQ should mandate that certain QAP or SAP elements should always be required for chemical sampling data to be accepted in the TMDL program (i.e., they would be non-waivable). These elements include those specified in proposed R18-11-602(A)(1)(c), (d) and (e) (relating to sampling design, field sampling requirements, and laboratory QA/QC). Without documentation that safeguards in these areas have been followed, we do not see how data can be considered reliable.

(b) To the extent the final rule provides that any requirement can be waived, the standard contained in the proposal does not appear to be unreasonable: ADEQ must determine that an element is not relevant to the sampling activity and that its omission will not impact the quality of the results. See proposed R18-11-602(A)(1). However, ADEQ should explain in the preamble how it will apply the relevance standard. When

is a QA/QC element not relevant to sampling? We think we understand the intent of the reference to the type of pollutants to be sampled (e.g., the full suite of QAP or SAP elements may not be necessary for field pH sampling or some types of biological sampling).

However, we are not sure why the "type of surface water" and the "purpose of sampling" should affect whether an element is relevant or data quality is impacted. The Arizona TMDL statute does not appear to support the notion that different quality assurance requirements apply based on the type of water in question. ADEQ should explain what it means by these references.

We are especially concerned with the reference to "any other related factor" as a basis for waiving the applicability of a QAP or SAP element. This open-ended language would appear to give ADEQ essentially unfettered discretion to accept data missing any or all quality assurance requirements. We request that this language be deleted, or that ADEQ explain clearly what constitute "related factors."

Response: The Department's experience with previous assessments is that when all the "readily available data" are assembled and evaluated, there is a broad range of QA/QC documentation that accompanies the data. Often staff spends a significant amount of time tracking down the necessary validation information. There have been times when data have not been used because the documentation could not be provided. Data collected before the effective date of this rule or data collected under the authority or requirement of another entity or legally enforceable agreement, for example, a NPDES permit, consent decree, WQARF or CERCLA site, may or may not have been collected according to a QAP or SAP meeting the requirements of R18-11-602, but the entity can provide the necessary documentation to validate the data. While the rule provides clear guidance on the data quality requirements, the Department believes it is important to retain the ability to approve the use of data for which adequate quality documentation can be provided, but which may lack, for example, some of the organizational structure that would be otherwise ideal.

The Department agrees with the commenter that "any other related factor" is already included within the purpose of sampling and revised subsections (A)(1) and (A)(2)(b) as follows:

(A)(1) *Quality Assurance Plan. A monitoring entity, contributing data for an impaired water identification or a TMDL decision, provides the Department with a QAP that contains, at a minimum, the elements listed in subsections (A)(1)(a) through (A)(1)(f). The Department may accept a QAP containing less than the required elements if the Department determines, that an element is not relevant to the sampling activity and that its omission will not impact the quality of the results, based upon the type of pollutants to be sampled, the type of surface water,* and *the purpose of the sampling*~~, such as compliance sampling, and any other related factor~~.

(A)(2)(b) *The Department may accept a SAP containing less than the required elements if the Department determines that an element is not relevant to the sampling activity and that its omission will not impact the quality of the results, based upon the type of pollutants to be sampled, the type of surface water,* and *the purpose of the sampling.*~~, such as compliance sampling, and any other related factor.~~

Comment 9 - 10: Both the QAP and the SAP should be approved by the Department prior to a monitoring entity's sampling of a surface water or stream segment for impairment.

In R18-11-602 of the proposed Rule, the Department has set forth the criteria for credible and relevant data for an impaired waters identification or Total Maximum Daily Load (TMDL) decision. In determining whether or not data submitted to the Department is credible, two critical elements to consider are the content and guidelines of a monitoring entity's Quality Assurance Plan (QAP) and Sampling and Analysis Plan (SAP). Although the Department has outlined an extensive series of requirements for the submission of QAP's and SAP's, they have also provided a window of opportunity for a monitoring entity's omissions of some of these requirements. We respectfully request that the Department consider incorporating some tighter safety language into the proposed rule to ensure that the critical elements of the QAP and SAP are in place *prior* to a monitoring entity's sampling of a surface water or stream segment.

1. Consideration should be given to requiring that a QAP and SAP be approved by the Department prior to sampling.

According to the provisions of the proposed Rule, R18-11-602(A), a monitoring entity's data is credible and relevant if they provide the Department with a QAP and/or SAP with the minimum elements outlined within the proposed Rule.[36] The Departments also maintains that they may accept a QAP or SAP containing less than the required elements however, if they determine that an element is not relevant to the sampling activity and that its omission will not impact the quality or relevance of the results.[37]

Considering that the main objective of the Clean Water Act is to ensure the protection and integrity of our state's surface waters, it is imperative that all data considered by the Department be credible. Therefore, it is incumbent upon the Department to make certain that resources expended on sampling, including the Department's consideration of a monitoring entity's WQS data, be founded upon data collection that is credible and relevant.

Recognizing that resources are limited and that credible and relevant data is critical to the accurate assessment of our state's surface waters, we respectfully request that the Department consider deleting the provision that allows a QAP and SAP to be submitted <u>with</u> the data.[38] And instead, we propose that the Department consider the incorporation of

language into the Rules that requires a monitoring entity to submit their QAP and SAP to ADEQ for pre-approval, so that any modifications needed to ensure that proper training, technique, etc., are in place, prior to sampling.

2. The QAP and SAP should both be submitted to the Department for their review and consideration.

The credible data criteria section of the proposed Rule requires the monitoring entity develop a QAP and SAP for the data to be considered relevant and credible.[39] Inexplicably, the proposed Rule also permits that the monitoring entity only needs to submit *either* a copy of the QAP or SAP. We respectfully request that the Department consider incorporating language that requires that both the QAP and the SAP, and any other relevant data, be submitted to the Department.

It is imperative that the Department is fully aware of all relevant information associated with the data collection and sampling analysis so that they can make an accurate assessment of the scientific validity of the data submitted. Given that the ultimate result of the data analysis may be the violation of a WQS, and/or the listing or delisting of one of our state's surface waters or stream segments, all relevant information should be available and considered in this decision making process.

Response: With respect to having QAPs and SAPs approved by the Department before sampling, as explained above, water quality monitoring is performed by various agencies, organizations, and individuals for many purposes. It would be inappropriate and unrealistic to expect everyone involved in water quality throughout the state, to obtain the Department's approval of their project, objectives, and protocols, before sampling. Should an entity choose to share the data with the Department, the entity will need to provide all the credible data documentation required in R18-11-602. Only then is it appropriate for staff to expend time and resources reviewing the data and the documentation for adequacy based on the rule. Despite budget and staffing issues, if a monitoring entity requests a review of a QAP or SAP, Department staff will review and provide comments based on the type of sampling proposed.

The Department agrees with the commentor and believes that the language in subsection (B)(1) is unclear. The intent of this subsection is to require the submission of both the QAP and SAP. The confusion may lie in the fact that some monitoring entities may develop separate QAP and SAP documents while others may only develop one document that contains both requirements. The language was intended to ensure that all the necessary information was provided to the Department, regardless of which "plan" it was contained in. Some entities, like the Department, may develop a QAP that covers all the environmental monitoring it will undertake. Then, the Department will develop site-specific or project specific SAPs that describe further details of the project, including the objectives of the project, site selection, types of samples, and frequency of sampling. The Department agrees that all relevant information should be included in the QAP and SAP. The Preamble has been updated to explain this issue and subsection (B)(1) has been revised as follows:

A copy of the QAP or SAP, or both, revisions to a previously submitted QAP or SAP, ~~or~~ and any other information necessary for the Department to evaluate the data under subsection (A)(4);

Comment 4 - 5: The proposed rule establishes minimum elements that must be submitted to ADEQ as part of a QAP and SAP, however the proposed rule also contains language that specifies that ADEQ may accept a QAP, SAP and other information and data that does not necessarily meet the minimum set of requirements specified in the rule. The purpose of codifying minimum requirements, for submission of information to ADEQ for evaluating a waterbody, is to prevent the type of situation that the proposed rule will create. The proposed rules create a situation where virtually any purported water quality information submitted to ADEQ can be used by the Department to evaluate the health of a water body.

As discussed earlier, without the existence of formal ADEQ Quality Assurance Plan development guidelines and data acceptance criteria guidelines this leaves the Department in a position of making judgement calls concerning the credibility of data, which could easily vary from one data set to another. This is especially true of data that does not even meet the minimum elements outlined within this rule. In light of this, ADEQ should revise the proposed rule language to indicate that the Department will consider a QAP or a SAP that contains less than the required elements only after the Department has formally developed and promulgated QAP and data acceptance guidelines. This will assure consistent use of information received and help reduce the possibility that data that is not current, credible or scientifically defensible is used for a listing decision.

The federal code of regulations at 40 CFR 130.7(b)(5) provides that each state should assemble and evaluate all existing and readily available water quality related data and information to develop an impaired waters list. This regulation does not however require that the state must apply the data when making an impairment evaluation unless you consider the process of rejecting some data as invalid as making an application. In fact, as discussed above, EPA now has guidance that indicates that data acceptance criteria should be developed by States so that only credible data be used for making water quality impairment decisions. The development of data acceptance criteria will also provide a tool to the States in fulfilling an obligation under 40 CFR 130.7(b)(6)(iii) that requires states to furnish rationale for any decision to not use existing and readily available data.

Response: The Department disagrees that separate QAP and data acceptance guidelines must be developed and promulgated in rule. As discussed at length in the stakeholder meetings, the elements of subsection (A) are the same 24 elements described in EPA Requirements of QA Project Plans (QA/R-5), EPA/240/B-01/003, March, 2001. These

quality assurance requirements are required for environmental sampling programs, including the Department's Water Division, under the Clean Water Act. The Department will provide access to this EPA document as well as example QAPs and SAPs through its web site. Department staff is available for consultation in developing QAPs or SAPs. The Department believes that the requirements of R18-11-602, R18-11-603, R18-11-604, and R18-11-605 establish the "data acceptance criteria" to ensure data are credible and scientifically defensible for use in assessment and listing processes. No change has been made to the rule.

Comment 5 - 3: We agree that there should be strong quality assurance for monitoring and analysis of data and encourage the ADEQ to help volunteer monitoring groups -- just as the agency assists regulated entities -- to meet the requirements.

Response: The Department agrees with the commenter. As noted in responses above, the Department will provide guidance and example documents regarding quality assurance for monitoring and data analysis and developing QAPs and SAPs.

The Department continues to encourage and support the development of volunteer monitoring groups. Department staff will be conducting training on water quality field monitoring techniques for students, watershed groups, and other interested citizens. The Water Quality Division has prepared water quality monitoring kits for use by citizen groups, especially watershed groups, to conduct field sampling. No change has been made to the rule.

Comment 7 - 16: Subsection (A). Arizona's TMDL statute provides that in determining whether a water is impaired, ADEQ must consider only "reasonably current" credible and scientifically defensible data. See A.R.S. § 49-232(B). In some earlier drafts of the impaired water identification rule, ADEQ included language that would have required data to be collected within the last five years before listing in order to be considered as reasonably current in accordance with A.R.S. § 49-232(B). In the proposed rule, however, ADEQ simply has referenced the statutory language in proposed R18-11-605(A) that data must be "reasonably current," rather than defining that term.

In the preamble to the proposed rule, ADEQ explains its interpretation of the "reasonably current" data requirement. Specifically, ADEQ states that:

"For assessment and impairment evaluation, information and data should be no older than five years. Older data may be used on a case-by-case basis if conditions have not changed and the older data is still representative, or the older data is used with newer data to demonstrate water quality trends. If used for listing, the Department will include an explanation as to why this older data continues to reflect current water quality conditions. The occurrence of major mitigation or remediation efforts will be considered during evaluation and some waters may be assessed based only on data collected after the mitigation actions are implemented. (8 A.A.R. 538)

We believe that these concepts from the preamble are critical and should be incorporated into the rule, either as a definition of "reasonably current" or as part of R18-11-605. Failure to do so could render the rule impermissibly vague.

The general preference for using only data less than five years old is consistent with the approach taken by numerous other states, including Texas, Florida, Nebraska, Missouri, and Colorado. See citations collected in Federal Water Quality Coalition & AMSA, *Preparation of Integrated Water Quality Monitoring and Assessment Reports: Recommendations for Clean Water Act § 303(d) and § 305(b) Methodologies and Reporting* (March 2002), at p. 22 (included as Attachment 9).

Response: The Department disagrees that a limit on the age of data should be included in the rule. 40 CFR 130.7 requiring states to "assemble and evaluate all existing and readily available data" supporting the use of older data provided the criteria for credible and scientifically defensible is met. As the commenter notes, the Preamble supports the use of data within an approximate five-year window but allows the use of older data on a case-by-case basis given certain conditions that the Department will include in the assessment. While the commenter is correct that some states have adopted a firm five-year window (Nebraska, Texas and Colorado), the final Florida rule allows for use of data up to 10 years old for the Planning List and up to seven years old for the Verified List (analogous to Arizona's 303(d) List). It is important to note that older data can also be used to keep a waterbody off the 303(d) List, especially where the older data are shown to be reflective of current water quality conditions and the newer data may suggest signs of impairment but is insufficient to prove impairment per the requirements of these rules. No change has been made to the rule.

Comment 8 - 9: It is not clear when this QAP and SAP will be required. It was indicated in one of the stakeholder meetings that this would not apply to end of the pipe situations or in NPDES municipal permit monitoring situations. This differentiation was not clear in the regulations. In fact, in subsection (A)(4)(c), data under the terms of a NPDES or AZPDES permit may be considered reliable.

We strongly disagree with this statement. Stormwater monitoring data should not be used for a Planning List or to make listing decisions. The stormwater program was designed to address nonpoint source pollution to the Maximum Extent Practicable (MEP) through the use of Best Management Practices (BMPs). The monitoring programs are very

specific and unique to each individual NPDES municipal permit. Monitoring was designed to address site-specific internal watersheds within municipalities, not to address waterbodies for TMDL listings. Some municipalities do monitoring within their municipalities from areas as small as one square mile and internal to the City. Results from those sites do not represent end-of-pipe conditions and even then are not in-stream monitoring systems. Also, since the AZPDES rule does not include monitoring as a required component of the federal Phase II NPDES program, why are ADEQ even adding NPDES/AZPDES permit data as a possible source of data for the TMDL program?

As the stormwater monitoring entity for four of the five municipalities within the greater Phoenix area, we strongly believe stormwater monitoring data needs to be treated separately and should not even be considered as part of the TMDL process. The NPDES program is an entirely different set of regulations and should be addressed as such. Although we do not disagree with the components of the QAP and SAP, (other than the potential use of NPDES/AZPDES data), we feel they are not in a position to have our data used to make listing decisions.

Response: First, an important clarification must be made – for any NPDES or AZPDES permit data to be used in an assessment or listing processes, it must be "instream" data not "end-of-pipe" data. Subsection (A)(4)(c) has been revised as follows:

> *The instream water quality data were or are collected under the terms of a NPDES or AZPDES permit or a compliance order issued by the Department or EPA, a consent decree signed by the Department or EPA, or a sampling program approved by the Department or EPA under WQARF or CERCLA, and the Department determines that the data yield results of comparable reliability to data collected under subsections (A)(1) and (A)(2).*

The Department must disagree with the commenter on the potential use of NPDES or AZPDES, including instream stormwater data, for assessment and listing. Provided the data meet the credible data requirements of this rule, and was collected in a water of the United States, instream data collected under a NPDES or AZPDES permit could be used for assessment and listing purposes. The Department understands the unique characteristics of stormwater sampling and would have to ensure that the data documentation clearly outlined critical factors, including the objectives of the sampling and the locations, frequency, and types of the sampling. If the documentation cannot confirm that the samples were representative of the water quality conditions at the time of sampling, were spatially and temporally representative samples or the sampling techniques could not be reproduced, the data would not be used. One of the tasks of the Department's new targeted monitoring team will be to develop, sample, and analyze plans for surface waters suspected of impairment due to discharges related to stormwater, for example municipal, mining, and industrial facilities. These SAPs must incorporate these concepts to ensure data validity and reproducibility.

As to whether TMDLs can be developed to address stormwater, EPA has repeatedly and consistently stated its position that TMDLs must address municipal stormwater discharges. The courts have found that waters meeting the criteria in section 303(d)(1)(A) and 40 CFR 130.7 must be listed without regard to the source of the pollutant causing the impairment (Pronsolino v. Marcus, 91 F. supp. 2d 1337 (N.D. Cal. 2000)). In Pronsolino, the court found "[s]ince all rivers and waters regardless of source of pollution source were included in the universe for which water-quality standards were required, all of them – again regardless of source of pollution – were included in the universe for which listing and TMDLs were required – save and excluding only those for which effluent limitations would be sufficient to achieve compliance with standards." (See, EPA, Notice of Proposed Rule, *Proposed Regulations for Revision of the Water Pollution Control Program Addressing Stormwater Discharges*, 63 FR 1536, 1582 (Jan. 9, 1998))

40 CFR 122.44(d)(1)(vii) currently requires that effluent limits in NPDES permits be consistent with assumptions and requirements of any available wasteload allocation (WLA) for the discharge contained in EPA-approved TMDLs. Consequently, where WLAs have been established for a municipal stormwater source in approved TMDLs, the permit needs to include terms and conditions consistent with the assumptions of the TMDL. In EPA's *Notice of Proposed Water Quality Guidance for the Great Lakes System*, 58 FR 20802, 20929 (Apr. 16, 1993), "nonpoint sources, stormwater discharges, and combined sewer overflows can typically be expected to have the greatest impact on receiving waters during storm events. While implementation procedures specific to wet weather events are not included in this guidance, TMDLs must consider pollution resulting from these wet weather events."

Comment 6 - 11: Subsection (A)(1)(d)(vii). We believe requiring this information to be included in a QAP is excessive for those entities that routinely collect water quality data. The requirement will necessitate the constant revision of the QAP to update it with the names and qualifications of the data collectors. This requirement also exceeds the stated requirements listed in *EPA Requirements for Quality Assurance Project Plans* regarding training and also in ADEQ's draft *Guidelines and Specifications for Preparing a Quality Assurance Plan*. In fact, in these documents EPA and ADEQ refer to the requirements as Special Training/Certification. Section 3.2.8 (or element A8) of *EPA Requirements For Quality Assurance Project Plans* requires the QAP to, "Identify and describe any specialized training or certifications needed by personnel in order to successfully complete the project or task. Discuss how such training will be provided and how the necessary skills will be assured and documented." This rulemaking greatly exceeds the specifications of this element by requiring that the QAP include the training background of each data collector. We believe that most tasks associated with water quality data collection are not difficult and require only that data collectors follow established data collection protocols. We again request that R18-11-602(A)(1)(d)(vii) be changed to require the QAP to only include any *specialized* training or certifications that are needed.

Response: The Department disagrees with the commenter. Subsection (A)(1)(d)(vii) states that "[m]inimum training and any specialized training necessary to do the monitoring, including the proper use and calibration of field equipment used to collect data, sampling protocols, quality assurance/quality control procedures, and how the training will be achieved."

The QAP requires the monitoring entity to identify both the minimum training and any specialized training required by personnel to conduct the monitoring. Nowhere does it suggest inclusion of the names and qualifications of individual data collectors. The request to identify the minimum training needed is necessary to determine if the samples were collected using persons having the appropriate level of skill necessary for the type of sampling. States have the discretion under section 303(d), which charges states with the primary responsibility to list impaired waters, and section 510, which authorizes states to adopt more stringent pollution controls, to include waters on their 303(d) Lists that may not be required under EPA regulations. To do so would require criteria more stringent than federal requirements, therefore, the Department believes that there are no regulations prohibiting the state from being more stringent than the minimum federal requirements. No change has been made to the rule.

R18-11-603. General Data Interpretation Requirements

Comment 6 - 10a: We are concerned this Rule will result in erroneous listings because it ignores how laboratories report their data and because it dispenses with the Practical Quantitation Limit (PQL) or Reporting Level (RL) concept. ADEQ agreed to address the issue of data below the PQL or MDL at the July 17, 2001 Stakeholder meeting. Rather than addressing the issue, ADEQ eliminated all references to PQLs and thus has ignored how laboratories report their data. Laboratories frequently report analytical results that are between the PQL and the MDL. These results are typically qualified as "Estimated," meaning that the laboratory can't accurately quantify the analyte (i.e. the true result could be as high as the PQL or be below the MDL). Locking data collectors into reporting data at the MDL level ensures that estimated data, including false positive data, will be used to list or delist waters. We do not believe that ADEQ intends to list waters based on little more than a guess. As written, the Rule ignores the fact that laboratories typically do not report analytical results at the MDL. ADEQ needs to incorporate the PQL/RL concept in the rule.

Response: As the commenter suggested, the Department has consulted with ADHS on the issue of detection limits and reporting. Instead of relying on the MDL, which is a single statistically derived value, or PQL, which is a specific, but arbitrary multiple of the MDL, the Department will use "laboratory detection limits." All references to MDL and PQL have been removed in the rulemaking and replaced with "laboratory detection limit," which is defined in R18-11-601 as follows:

> *"Laboratory detection limit" means a "Method Reporting Limit" (MRL) or "Reporting Limit" (RL). These analogous terms describe the laboratory reported value that is the lowest concentration level included on the calibration curve from the analysis of a pollutant and that can be quantified in terms of precision and accuracy.*

Other minor changes to the rulemaking were made to aid in clarifying this issue. Subsection (1) has been revised as follows:

1. Data reported below laboratory detection limits ~~MDLs.~~
   a. When the analytical result ~~sample value~~ is reported as <X, where X is ~~less than or equal to~~ the laboratory detection limit for the analyte ~~MDL~~ and the laboratory detection limit ~~MDL~~ is less than or equal to the surface water quality standard, consider the result as meeting the water quality standard:
      ~~i. The Department shall consider the result as meeting the water quality standard; and~~
      i. Use these statistically derived values in trend analysis, descriptive statistics, or modeling ~~If~~ if there is sufficient data to support statistically estimating values reported as less than the laboratory detection limit ~~MDL, the Department shall use these statistically derived values in trend analysis, descriptive statistics or modeling~~; or
      ii. Use one-half of the value of the laboratory detection limit in trend analysis, descriptive statistics, or modeling ~~If~~ if there is insufficient data to support statistically estimating values reported as less than the laboratory detection limit ~~MDL, the Department shall use one-half of the value of the MDL in trend analysis, descriptive statistics, or modeling~~.
   b. When the sample value is less than or equal to the laboratory detection limit ~~MDL~~ but the laboratory detection limit ~~MDL~~ is greater than the surface water quality standard, ~~the Department shall~~ not use the result for impaired water identifications or TMDL decisions.

MDL has been replaced with "laboratory detection limit" throughout the rulemaking. See the, R18-11-602(A)(1)(e)(i), R18-11-604(D)(2)(c)(iv), R18-11-604(D)(2)(g) and R18-11-605(B)(2)(e)(iii).

Comment 6 - 10b: We also believe that this Rule needs to be consistent with the Surface Water Quality Standards (SWQS) rule regarding PQLs. According to the SWQS, a numeric water quality standard set below the PQL is

enforced at the PQL (R18-11-120(B) *"The Department may establish a numeric water quality standard at a concentration that is below the practical quantitation limit. In such cases, the water quality standard is enforceable at the practical quantitation limits."*). By virtue of R18-11-120(B), ADEQ acknowledges that data reported below the PQL are questionable or unreliable. R18-11-120(B) is consistent with the manner in which laboratories report analytical results. Laboratories report a value observed below the laboratory PQL (laboratory's refer to it as a reporting level or RL) and above the MDL as an "estimated value." We believe that this rulemaking erred in that it redefined water quality standard exceedances. Redefining water quality standard exceedances to support the purposes of a particular rule ensures programmatic incongruity in the interpretation of SWQS. The SWQS is the appropriate place to define a water quality standard exceedance and the this rulemaking must defer to the SWQS.

Furthermore, this Rule demonstrates a complete lack of understanding of ADHS Rules on laboratory reporting of data and a limited understanding of MDLs. The Rule accurately defines an MDL but it does not recognize that labs rarely report results at the published MDL. Reasons for this include matrix interferences, equipment sensitivity, analyst expertise and the use of dilutions. We understand that ADHS rules do not allow laboratories to report their results at the MDL level because in nearly all cases, the conditions for analysis are not conducive to analyzing down to the MDL. The MDL is the number published in the method and represents the lowest number that can be observed for a sample that is relatively clean, contains no interfering agents and is analyzed under ideal conditions. It is not expected that laboratories can routinely report results at or near the MDL.

At a minimum, ADEQ needs to rework the phrase "When the sample value is less than or equal to the MDL" as it is confusing. In the real world, sample values cannot be less than the MDL. Perhaps ADEQ should reword to "When the analytical result is reported as '<X' where X is the MDL for the analyte." If the sample value is equal to an MDL, that assumes that the value is a real value and, therefore, "or equal to" is not needed in this phrase. This rulemaking acknowledges that only results reported as less than the MDL are considered to be meeting the SWQS, thus, effectively redefining the SWQS. R18-11-603.1.a.i. infers that a water quality standard is exceeded in those cases when the water quality standard is set below the PQL/RL and the concentration reported is above the standard but below the PQL/RL. For example, assume a PQL of 100, an MDL of 10, and a water quality standard of 50. According to this rulemaking, a result between 10 and 50 (and anything less than 10 even though it is not possible to get an analytical result below 10) would be considered an exceedance because this rulemaking states "…the Department shall: Consider a measurement value reported as less than the applicable MDL as meeting the surface water quality standard."

How data are reported by laboratories is a critical issue. We requests ADEQ to consult with ADHS Laboratory Licensure before finalizing the Rule. ADHS regulates laboratories and has specific requirements regarding the reporting of data. ADEQ needs to understand these Rules to ensure that this rulemaking is written in conformity with the ADHS rules regarding the reporting of data at or near the MDL or RL.

Response: The Department disagrees with the commenter that the rule redefines the surface water quality standards. The detection limit language in subsection (A)(1) establishes criteria for how the Department will evaluate analytical results that are below laboratory detection limits, whether these values can be used in statistical analysis and, if so, how these values will be treated in the analyses for assessment and listing decisions. The language at R18-11-120(B) refers to enforcement of water quality standards and predominantly affects discharge permits. The Department has repeatedly stated that the assessment and listing processes are not *enforcement* actions and therefore, use of the PQL language as outlined in R18-11-120(B) would be inappropriate. Discussions with ADHS indicates that PQL is a specific but arbitrary multiple of the MDL, anywhere from 3-10 times the MDL. A PQL is defined in the surface water quality standards at R18-11-101(37) and it is not analogous to the RL despite the assertion of the commenter. As discussed above, the Department has removed all references to MDL and PQL in favor of "laboratory detection limit."

Comment 5 - 4: According to this section of the rule, if a surface water quality standard is less than or equal to the method detection limit (MDL) then it is considered to be meeting the water quality standard. Sampling, testing, and data collection methods and analyses have margins of error. The documentation with the rule states, "This information is only provided as guidance and must be exercised with good judgment." That is not what the rule states however. Doesn't this mean the default is toward less protection? Why is the Department not proposing to err on the side of caution?

Response: See comments in 6 - 10 a and b above, related to use of MDL and rule revisions replacing MDL with laboratory detection limits (LDL).

The Department disagrees that the language in subsection (A)(1)(a) is less protective. This is a case of example #1 in Figure 5 of the Preamble where the RL/MRL (previously stated as MDL) is less than the water quality standard. A sample value reported at or below the RL/MRL (previously stated as MDL) is also less than the standard. The examples given in the Preamble provide a visual picture to clarify an extremely complex concept.

The commenter questions "Why is the Department not erring on the side of caution?" As the commenter points out, all sampling, testing, and data collection methods have degrees of uncertainty, inaccuracies, and error. R18-11-602 and R18-11-603 establish the minimum quality control/quality assurance requirements and the general data interpretation criteria that the Department will use to evaluate data collected by staff and others. The purpose of these criteria is to remove or reduce both random and systematic errors inherent in environmental data collection and analysis. Because almost all errors (both random and systematic) are due to the observer, the instrument or equipment, the

measurement method, technique, or process, the degree of error can be decreased appreciably through standardization of analysis and use of recommended methods. No change has been made to the rule.

Comment 8 - 10: Subsection (1)(a). We agree and support ADEQ on these two concepts (subsection (1)(a)(i) and (iii)), however, in (1)(a)(ii), we disagree.

Although, sufficient data may be available to indicate something is below the detection limit, data would potentially be skewed if a value were set equal to the detection limit. The fact a value is less than the detection limit indicates to us that a value is somewhere between the range of 0 and the detection limit. All results could potentially be 0, however, by setting everything equal to the detection limit, the statistics could in fact be over estimating the true effect of a pollutant. As such, we disagree with this comment.

Response: The commenter may have been reviewing an older draft of the rule when this comment was made because the rule cited does not call for setting the value *equal* to the detection limit. The rule language is shown in comment 6 - 10 above. The purpose of subsection (1) is to establish the procedures for evaluating data that include values below the detection limits for use in trend analysis, descriptive statistics or modeling. The proper statistical procedure for analyzing data with "nondetects" depends on the amount of data below the detection limits and the sample size. EPA's "Guidance for Data Quality Assessment: Practical Methods for Data Analysis, EPA QA/G-9, July, 2000" states that for relatively small amounts below detection limits, replacing the nondetects with a small number, for example, DL/2, DL, is satisfactory. For moderate amounts of data below the detection limit, a more detailed adjustment is appropriate, for example, trimmed means, Windsorized means or use of the standard deviation. When relatively large amounts of data below the detection limit exist, more advanced statistics may be required, for example, use of Poisson distribution or tests of proportions.

The language in subsection (A)(1)(a) establishes this concept of statistically estimating the value of these nondetects based on the existing data provided there is a sufficient amount of data to support the analysis. Subsection (A)(1)(a) establishes that if there is an insufficient amount of data to perform the statistical estimation, the Department will use one-half the detection limit (DL/2) in the analysis. Although the Department agrees that substitution of the detection limit would tend to over-estimate the true effect of the pollutant, it likewise believes that substitution of zero would tend to under-estimate the true effect. Using one-half the detection limit is a widely used and generally accepted statistical convention.

Comment 8 - 11: Subsection (3). We like and support this Weight-of-evidence approach, however, we do have some concerns addressed in our comments to Section R18-11-605.

Response: See responses to comments 8 - 18 through 8 - 24 in R18-11-605.

Comment 7 - 20: Subsection (4). The proposal allows "invalid" data (e.g., transcription errors, outliers, data outside physical measuring range of equipment) to be used to place a water on the Planning List See proposed R18-11-603(4). This is illogical. Most of the data identified as "invalid" (e.g., transcription errors, data outside physical measuring range of monitoring equipment) is clearly of no reliability and should not be used for any purpose, including placement of a water on the Planning List.

Response: The Department thanks the commenter for pointing out the conflict. The intent was to exclude invalid data from all decision making processes. Subsection (B) has been revised as follows:

> ~~*Invalid data.*~~ *The Department shall not use the following data for placing a surface water or segment on the Planning List, the 303(d) List, or in making a* ~~*listing or*~~ *TMDL decision:*

Comment 1 - 1: Subsection (4)(c). We are concerned that subsection (4)(c) provides for exclusion of data shown to be "statistical outliers." Standard statistical methods do not recommend the exclusion of apparent outliers without a strong scientific basis. EPA's "Guidance for Data Quality Assessment" (EPA/600/R-96/084, available at http://www.epa.gov/quality/qa_docs.html) states that:

"One should never discard an outlier based solely on a statistical test. Instead, the decision to discard and outlier should be based on some scientific or quality assurance basis. Discarding an outlier from a data set should be done with extreme caution, particularly for environmental data sets, which often contain legitimate extreme values. If an outlier is discarded from the data set, all statistical analysis of the data should be applied to both the full and truncated data set so that the effect of discarding observations may be assessed. If scientific reasoning does not explain the outlier, it should not be discarded from the data set." (EPA/600/R-96/084, p. 4-26).

The rule provisions for addressing statistical outliers should be revised consistent with this guidance. We recommend a procedure which uses the statistical methods described in the EPA guidance cited above, carefully documents the prospective consequences of discarding outliers (by analyzing data sets with and without the outliers), and provides a robust scientific basis for any decision to discard outliers from consideration in the listing assessment.

Response: The Department agrees that the rule language should be clarified. The intent of the provision is that statistical outliers are evaluated to determine whether they represent valid measures of water quality. If they do not, then, and only then, will they be excluded from consideration. When dealing with extreme values, the Department will use appropriate statistical tests to determine whether the data point is a statistical outlier. If the Department determines that the data point is an outlier, the Department will conduct additional analysis to resolve whether the data in question should be used, discarded, or corrected. The decision, to discard, include, or correct the data, and the scientific basis for the decision shall be documented.

The Preamble has been modified to reflect this clarification and subsection (B)(3) has been modified as follows:

~~Statistical outliers~~ An outlier, identified through statistical procedures where further evaluation determines that the outlier ~~analysis appropriate to the dataset that do not represent measures~~ represents a valid measure of water quality ~~and whether it~~ but should be excluded ~~for~~ from the dataset.

Comment 8 - 12: Subsection (6). The wording, "The Department shall employ modeling,…" we believe is too strong. This wording forces ADEQ to do modeling when in fact modeling may not be the most appropriate method to come up with a listing decision. We recommend the insertion of the word "may" in place of the word "shall."

We recognize that ADEQ may have to opt for other approaches to help with listing decisions due to Arizona's unique climatic conditions, however, our experience has been that with modeling the unknowns become even greater. Assumptions are always made when the modeling approach is used. As such, this results in much greater variability. Due to this variability and the unknown (margin of safety) component to a TMDL, we believe ADEQ may potentially be developing unachievable TMDLs that will never be met. This will cause great grief for the regulator (ADEQ) and the regulated (entities affected by the TMDL) and result in no environmental improvement.

Response: The Department agrees that use of the word "may" is more appropriate and more clearly reflects the Department's intent subsections (C), which covers the use of statistical tests in assessment, listing or TMDL development and (D), which covers the use of models in assessment, listing or TMDL development. Subsections (C) and (D) have been revised accordingly.

Comment 1 - 2: Subsection (7)(a). As discussed in our prior comments, we are also concerned that subsection (7)(a) requires the application of the appropriate measure of central tendency for the datasets for several pollutants for which applicable state water quality standards are expressed as single sample maximums or four day averages. Datasets for these pollutants should be evaluated based on the maximum values for the datasets. Alternatively, we would expect ADEQ to explain in the final rule or the list submittal how the proposed use of measures of central tendency to characterize these standards is consistent with applicable water quality standards.

Comment 8 - 13: Subsection (7). The wording in this section seems contradictory. In one respect, ADEQ are requiring spatially independent samples, temporally independent samples and multiple samples, yet in their next sentence they discuss what happens if these conditions are not met.

Our belief is that if these conditions are not met, the data *should not be used or more data should be obtained* so that you have spatially independent samples, temporally independent samples and multiple samples.

Response: The Department disagrees that the use of central tendency in this subsection is in conflict with Arizona's surface water quality standards. R18-11-605 establishes the requirements for determining whether a surface water is impaired, including having an adequate number of samples for evaluation of certain numeric standards, for example, chronic criteria and annual mean, 90th percentile. A key criterion in R18-11-605 is the use of spatially and temporally independent samples. The provision at subsection (A)(4) only applies to how the Department will consolidate "dependent" samples. In other words, those samples that are not either spatially or temporally independent. This Section does not directly address listing decisions.

The Department believes that the first sentence in this subsection may have added to the confusion. Subsection (A)(4) has been revised as follows:

~~The Department shall use spatially independent samples, temporally independent samples, and multiple samples to evaluate surface water data for numeric surface water quality standards exceedances. The following resultant values shall represent the dataset.~~ When multiple samples from a surface water or segment are not spatially or temporally independent, or when ~~multiple~~ lake samples are from ~~a lake are not depth dependent~~ multiple depths, use the following ~~methods will be used to determine a~~ resultant value to represent the specific dataset ~~for each parameter~~:

a. The appropriate measure of central tendency for the dataset for:

i. ~~The surface water quality standard for~~ A pollutant listed in the surface water quality standards 18 A.A.C. 11, Article 1, Appendix A, Table 1, except for nitrate or nitrate/nitrite;

ii. ~~The~~ A chronic water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 2;

iii. A surface water quality standard for a pollutant that is expressed as an annual or geometric mean;

iv. The surface water quality standard for temperature or the single sample maximum water quality standard for turbidity, nitrogen, and phosphorus in R18-11-109;

v. The water quality standard for radiochemicals in R18-11-109(I); or

vi. Except for chromium, all single sample maximum water quality standards in R18-11-112.

b. The maximum value of the dataset for:

i. The acute water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 2 and acute water quality standard in R18-11-112;

ii. The surface water quality standard for nitrate or nitrate/nitrite in 18 A.A.C. 11, Article 1, Appendix A, Table 1;

iii. The single sample maximum water quality standard for bacteria in subsections R18-11-109(B) and (C); or

iv. The 90th percentile water quality standard for nitrogen and phosphorus in R18-11-109(H) and R18-11-112.

c. The worst case measurement of the dataset for:

i. Surface water quality standard for dissolved oxygen under R18-11-109(D). For purposes of this subsection, "worst case measurement" means the minimum value for dissolved oxygen;

ii. Surface water quality standard for pH under R18-11-109(G). For purposes of this subsection, "worst case measurement" means both the minimum and maximum value for pH.

R18-11-604. Types of Surface Waters Placed on the Planning List and 303(d) List

Comment 5 - 5: Subsection (A) reads, "The Department shall evaluate, at least every five years, Arizona's surface waters by considering all readily available data according to R18-11-605." While this section says the ADEQ is required to look at all readily available data, it clearly is not. The rule package and the associated law significantly limit what data the Department can consider in making a decision to list a stream as impaired.

Response: The Department disagrees. The rule supports 40 CFR 130.7(b) that requires states to assemble and evaluate all readily available data. This requirement does not, however, state that all data, regardless of its credibility be used in the assessment and listing processes. This rulemaking establishes the necessary guidance, criteria, and science-based decision making to ensure that waters are appropriately placed on the 303(d) List. All available data are reviewed and evaluated in this process, but only the data that meet the credibility requirements carries forward into listings or TMDL decisions. All data are included in the assessment. In addition, states are required under federal requirements to show "good cause" and supporting rationale for not listing a waterbody where the evidence suggests, but does not confirm, impairment. Subsection (A) has been revised as follows:

A. The Department shall evaluate, at least every five years, Arizona's surface waters by considering all readily available data ~~according to R18-11-605~~.

1. The Department shall place a surface water or segment ~~meeting the criteria for listing under R18-11-605 on either the~~ on:

a. The Planning List if it meets any of the criteria described in subsection (D), or

b. ~~the~~ The 303(d) List if it meets the criteria for listing described in subsection (E).

2. ~~The Department shall not place a surface water or segment on the Planning List or the 303(d) List that does not meet the criteria for listing under R18-11-605(C) or (D), or meets the exception criteria in subsection (C).~~ The Department shall remove a surface water or segment from the Planning List, based on the requirements in R18-11-605(E)(1) or from the 303(d) List, based on the requirements in R18-11-605(E)(2).

3. The Department may move surface waters or segments between the Planning List and the 303(d) List based on the criteria established in R18-11-604 and R18-11-605.

Comment 7 - 30: The default method used to determine how much of a stream is impaired is EPA's reach file system. See proposed R18-11-604(B). We are not familiar with this system, and are not sure how it compares to the National Hydrography Dataset recommended by EPA in the *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* or to the delineation of segments by the state in the surface water quality standards rules. ADEQ has indicated that the reach file system is a more precise measurement than either of these two other alternatives. To the extent that is accurate, we support using the reach file system because it would allow for better delineation of impacted waters.

Response: The Reach File system is a geographic information system (GIS) display of all the hydrography within a drainage area. When the reach file was introduced, streams had been segmented by EPA primarily at the confluences with major tributaries. In 1990, the Department began using EPA's Reach File System to segment streams rather than

assess entire rivers or very long segments listed in Appendix B of the surface water quality standards. A "reach" is represented by the Hydrologic Unit Code (HUC) followed by a reach number. For example, 15060202-018 is a reach on Oak Creek in the Verde Watershed. Since 1990, the Department has further segmented these streams based on designated use changes within a reach or information about the extent of contamination pursuant to a TMDL study.

Reach File III (RF3) replaced earlier versions in the mid-1990's. It included many tributaries that had not previously been on the digitized hydrography. RF3 also contained a revised numbering system that changed many reach numbers. To provide consistency with previous assessment, the Department kept the original numbers as much as possible and added tributary numbers. The Department is working with its Information Technology group to provide access to RF3 and the NHD. If the Department is able to provide access to either system, the user will need to have Arcview to access the files. The Department is preparing examples of each system which it will place on the web site.

The National Hydrography Dataset (NHD) was released by EPA in 2000 and contains the same digitized hydrography but without any reach number reference. The intent of the NHD is to allow states to assess any size segment or portion of a stream or lake and to assess drainage areas based on monitoring sites. The amount of area assessed by one monitoring site is determined by the state and varies widely from state to state. Arizona's 2002 303(d) List will be based on the RF3 System while the Department continues to transition over to the new NHD. All states are required to adopt the NHD by the next listing cycle (date still to be determined). Arizona is investigating methods of assessing contributing drainage or watershed areas for individual monitoring sites. Other states are conducting similar analyses, however, the criteria developed by states with perennial dominated hydrology will probably have limited applicability to Arizona. Reference to the NHD has been added to R18-11-604(B) so that subsequent lists can use that system as required by EPA.

Comment 6 - 3: Municipal storm water discharges should be exempt under proposed R18-11-604(C). Congress amended the CWA to regulate municipal storm water discharges under section 402(p). That regulatory program is based on best management practices that reduce pollutant loads to the maximum extent practicable. This is independent of and in lieu of the section 301 technology-based requirements. *Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9th Cir. 1999). The listing requirement under section 303(d)(1)(A) applies only to waters that are impaired due to a lack of stringency in effluent limitations required by sections 301(b)(1)(A) and (B) of the CWA. If Congress had wanted to subject municipal storm water to the 303(d)(1) process, it would have amended that section to include section 402(p).

Publicly owned lakes should also be added to the list of exempt facilities under proposed R18-11-604(C). Section 314 of the CWA establishes the "Clean Lakes Program" to specifically address water quality problems at publicly owned lakes. Section 314 is not referenced in section 303(d)(1). Including publicly owned lakes in the proposed rule would render section 314 superfluous. Moreover, section 314 provides different legal authority to address those water quality problems in a manner that is substantially different from section 303(d).

Response: Neither section 303 of the Clean Water Act nor EPA's implementing regulations recognize the exemption proposed by the commenter. To the contrary, waters meeting the criteria in section 303(d)(1)(A) and 40 CFR 130.7 are to be listed without regard to the source of the pollutant causing the impairment. (See Pronsolino v Marcus, 91 F. Supp. 2d 1337 (N.D. cal. 2000) The commenter contends that omitting reference to section 402(p) in section 303(d)(1)(A) limits the types of waters to be listed. However, the sections in section 303(d)(1)(A) list the authorities for those effluent limitations whose implementation may excuse the requirement to list. Contrary to the proposed premise, congress' determination to omit section 402(p) from the listed of sections cited in section 303(d) narrows the grounds for not listing an impaired water (See, Pronsolino, supra.)

See response to comment 8-9 under the Credible Data section of this Comment/Response section. No change has been made to the rule.

Section 314 of the Clean Water Act requires states to prepare and submit to the Administrator, on a biennial basis:

(E) a list and description of those publicly owned lakes in such state for which uses are known to be impaired, and

(F) an assessment of the status and trends of water quality in lakes in such state, including but not limited to, the nature and extent of pollution loading from point and nonpoint sources and the extent to which the use of lakes is impaired as a result of such pollution, particularly with respect to toxic pollution.

The Department interprets these requirements as the 303(d) List and the 305(b) Report, respectively. Furthermore, EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* states:

"Data and information found in the following documents is existing and readily available and should be considered as a basis for identifying impaired waters consistent with the state's or territory's water quality standards and assessment and listing methodology:

i. The section 305(b) report, including the section 314 lakes assessments."

Comment 7 - 7: Subsection (C)(1). We support the verbatim inclusion of the statutory language on not listing waters where naturally occurring conditions alone would suffice for listing. See proposed R18-11-604(C)(1). This tracks precisely the controlling language in A.R.S. § 49-232(D).

Response: The Department appreciates the comment.

Comment 7 - 14a: Subsection (C)(1)(a) Although the proposal adopts the statutory language on impairment relating to naturally occurring conditions, ADEQ in the preamble espouses an interpretation of the language that seems inconsistent with that language. See 8 A.A.R. 542. In the preamble, ADEQ seems to be saying that the naturally occurring condition language can apply only if there is no human-caused influence on a water. Such an interpretation appears inconsistent with the plain language of A.R.S. § 49-232(D). It also could lead to illogical results – if a standard would be exceeded even if all human influence were removed, a water would be perpetually listed under § 303(d) unless the TMDL implementation plan somehow was designed to "remedy" natural conditions (or unless the underlying standard was changed).

Response: The Department disagrees with the commenter's interpretation of the Preamble language. The statutory language regarding naturally occurring conditions is used in R18-11-604(C)(1)(a) and R18-11-605(E)(6). The Department believes that where a waterbody is impaired due solely to naturally occurring conditions and there are no human-caused influences on the waterbody, the waterbody would not be listed as impaired per the exclusion in the water quality standards at R18-11-119. This a determination and the data supporting it must be documented in the assessment and made available to EPA and the public.

Comment 7 -14b: Subsection (C)(1)(b) In addition, we request that ADEQ clarify how it will treat pollutant loadings present in international (or interstate) waters at the point where they flow into Arizona. ADEQ will not be able to control loadings occurring in a foreign state or country. We believe it would be logical to treat such loadings in the same fashion as a naturally occurring condition.

Response: The Department is in contact with adjoining states to determine what surface waters affecting both states are being listed and for what pollutants. Many states and interstate agencies have developed joint TMDLs and implementation plans. As to the issue of international TMDLs, the commenter is correct that there is uncertainty associated with the ability to implement a TMDL restoration strategy in a foreign country. For this reason, TMDLs on international waters may be given a lower priority due to the length of time necessary to reach concurrence on strategies (see R18-11-606(B)(3)(g)). In situations where a waterbody is impaired due to pollutant loads from a foreign country, for example, Santa Cruz River from the border to the Nogales International WWTP outfall, the Department will work with EPA and the International Border and Water Commission to resolve the issues, including where necessary, the development of a TMDL and associated action plan. No change has been made to the rule.

Comment 7 - 23: Subsection (C). We support the requirement to use representative data in TMDL decisions (R18-11-605(B)(1)(b) and (c)). Consistent with this approach, data reflecting temporary impacts should be identified as an exception in R18-11-604(C) and should not be used in making assessments. Examples of such data are temporary impacts from spill or physical impacts from scouring after major storm events. Other states do not consider data reflecting such impacts in making listing decisions. See F.A.C. § 62-303.420(5) (excluding, *inter alia*, data from spills); Attachment 4 (Colorado guidance) at p. 3 (indicating that data collected after events temporarily impacting a waterbody should not be considered).

Comment 5 - 6: Subsection (D)(2)(h) will result in the premature de-listing of streams or stream segments. It states that a stream can be placed on the planning list rather than being listed as impaired if it is expected to attain its designated use by the next assessment as a result of existing or proposed technology based effluent limitations or other pollution control programs under local, state, or federal level authority.... This section would allow a polluting entity to keep a water body off the 303(d) List by proposing a pollution control program that they claim will attain water quality standards in the future. This is inappropriate. What if they fail to implement the control program or implement it improperly? What if it does not result in the attainment of water quality standards as expected? This should not be used as a reason not to list a water body. If it indeed does meet the water quality standards, then it can be delisted in the next round.

Comment 7 - 28: Subsection (D)(2)(h). The proposal allows "expected to meet" waters to be placed on the Planning List rather than the 303(d) List if the water is expected to attain standards by the next assessment. See proposed R18-11-604(D)(2)(h). The *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*, however, says that waters can be held off the 303(d) List if they are expected to meet standards "in the near future." See pp. 6, 9 and Appendix B, p. 5. The state rule should be modified in a similar fashion.

Response: The Department agrees with the commenter that temporary impacts should not form the sole basis for listing a surface water as impaired. The Department does not agree, however, that temporary impacts should be added to the exclusion portion of the rule and eliminated from evaluation. Under the weight-of-evidence approach, to be listed on the 303(d) List, impairment must be due to conditions that are persistent, seasonal, or recurrent (see R18-11-

605(B)(1)(b)). If the impact of an event, such as a spill, was cleaned up and the cleanup was documented, the influence of the incident would not be persistent or recurrent and the waterbody would not be listed as impaired.

(40 CFR 130.7(b)(i), (ii), (iii) allows that a surface water not be listed if there are enforceable control mechanisms in place that will bring the water into compliance with applicable water quality standard. EPA guidance specifies that a waterbody that is threatened or impaired for one or more designated uses would not require a TMDL to be developed if "other pollution control requirements are reasonably expected to result in the attainment of the water quality standard in the near future." (EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*) To avoid the listing and subsequent TMDL, the pollution control requirements required by a local, state, or federal authority must be stringent enough to attain and maintain the applicable water quality standard and must be specific to the particular water quality problem. The state must document that reasonable progress is being made towards achieving the standard by the next listing cycle.

If an incident, such as a major spill, required a lengthy remediation process, the waterbody would be placed on the Planning List for tracking purposes while the cleanup was conducted. If subsequent monitoring, conducted before the next listing cycle, showed that the impacts had been resolved, the waterbody would not be listed. This concept is reflected in subsection (D)(2)(h) but as originally proposed also allowed for voluntary efforts. Subsection (D)(2)(h) has been revised as follows to meet EPA requirements that control mechanisms be "enforceable" under a local, state, or federal program:

> *The surface water or segment is expected to attain its designated use by the next assessment as ~~the~~ a result of existing or proposed technology-based effluent limitations or other pollution control requirements ~~programs~~ under local, state, or federal authority.~~ or where the clean-up of a pollutant is complete and documented, or~~ The appropriate entity shall provide the Department with the following documentation ~~is provided~~ to support placement on the Planning List:*

Comment 6 - 12: The list of exceptions for listing in R18-11-604(C) should be expanded to include another category:

"The physical characteristics of the water body are a substantial factor in nonattainment of a water quality standard. Considerations include but are not limited to seasonal or persistent lack of flow, inadequate substrate for the survival or propagation of aquatic life, and significant changes in the velocity of water flow."

The rationale for this is that some waters may be viewed as not attaining standards when the substantial problem is caused by physical limitations that override water quality considerations. The proposed rule has an exception for impairments caused by naturally occurring pollutants. This exception for impairments caused by physical constraints is a companion exceptions that is supported by the same rationale that justify the exception for naturally occurring pollutants.

In reality, a site specific standards modification should be done for waters that have physical constraints that impede attainment. However, the listing timetables imposed by the EPA may not allow time to complete a revision to the water quality standard. Moreover, the physical constraint may be only temporary, such as during seasonal events. The listing rule should take into account temporary and permanent conditions that cannot be effectively addressed with modified water quality standards.

Response: The Department disagrees that physical limitations of a waterbody "override" water quality considerations. However, subsection (D)(2)(f) allows a waterbody, shown to be impaired due to pollution rather than a pollutant, to be placed on the Planning List for further investigation. This facilitates the Department's examination as to whether a site-specific standard or designated use adjustment is necessary. The commenter is correct that federal regulations and the state water quality standards recognize "physical conditions related to the natural features of the surface water; such as the lack of a proper substrate..." (R18-11-104(H)(5)) as reasons to support a designated use change through a use-attainability analysis. For temporary conditions, the weight-of-evidence section in R18-11-605(B)(2)(c), requires the Department to evaluate factors such as "hydrology, flow regime,...natural processes, and anthropogenic influences..." in determining whether a water quality standard is exceeded. The Department believes the current rule language provides sufficient guidance with respect to physical characteristics. No change has been made to the rule.

Comment 8 - 14: Subsection (C)(1)(b). The section talking about NPDES/AZPDES variances etc. should be deleted. As discussed in our comments earlier, listing decisions should not be made based on NPDES/AZPDES permits.

To clarify what we are referring to as a NPDES/AZPDES permit is a Municipal Separate Storm Sewer System (MS4) Permit. This is very different in concept from an industrial or construction permit.

ADEQ must recognize that the MS4 permitting system is basically taking a nonpoint source system and trying to regulate it according to a point source permit program. In the case of an industrial permittee, that is an actual point source. This is very different in concept than an MS4 permit. An MS4 has many unknowns, whereas an industrial permit does not.

If ADEQ are not intending to use MS4 data for listing decisions, ADEQ must differentiate in rule what type of NPDES/AZPDES permits they are talking about. We would like further clarification on how ADEQ intend to address this issue.

Response: See response to comment 8 - 9 in R18-11-602, and comment 6 - 3 in R18-11-604.

Comment 1 - 11: As discussed in our earlier comments, Arizona water quality standards do not appear to exempt from coverage waters to which the exceptions referenced in subsection (C)(2) apply. While the activities referenced in this section may not be subject to regulation as pollutant sources that would receive TMDL allocations and associated control expectations, the receiving waters themselves would have to be listed if applicable water quality standards are exceeded. We would like to understand the basis for interpreting water quality standards to allow the exceptions from listing created by this section.

Response: The Department disagrees. Other than R18-11-116, each of the exceptions referenced in subsection (C) has specific language in the appropriate Section in the surface water quality standards stating that activities or occurrences "are not violations of this Article." The impaired waters identification rule is used for determining whether a surface water failed to meet any applicable water quality standard, including numeric criteria, narrative criteria, water body uses, and antidegradation. For the activities or occurrences covered under R18-11-117 through R18-11-119, excursions of these standards are not considered violations and, therefore, are not considered when evaluating a waterbody for impairment.

Subsection (C)(3) has been revised to remove reference to R18-11-116 dealing with resource management agencies as there is no "exclusion" provision in the language. The revision also shows that a waterbody exceeding a water quality standard due to one of the approved exemptions would not be placed on either the Planning List or the 303(d) List:

C. Exceptions.

~~1.~~ The Department shall not place a surface water or segment on either the Planning List or the 303(d) List if the non-attainment of a surface water quality ~~standards~~ standard is due to one of the following:

1.~~a.~~ Pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of applicable water quality standards; ~~or~~

2.~~b.~~ The data were collected within a mixing zone or under a variance or nutrient waiver established in a NPDES or AZPDES permit for the specific parameter and the result does not exceed the alternate discharge limitation established in the permit. ~~Data~~ The Department may use data collected within these areas ~~may be used~~ for modeling or allocating loads in a TMDL decision; or

~~2.~~3. ~~The Department shall place a surface water or segment on the Planning List if the non-attainment of surface water quality standards is due to an~~ An activity exempted under ~~R18-11-116,~~ R18-11-117, R18-11-118, or a condition exempted under R18-11-119.

Comment 7 - 31c: Exemption from Coverage: EPA's objection to the exceptions in R18-11-604(C)(2) appears to be based on a position that the exceptions are not consistent with Arizona's surface water quality standards. As noted above, however, the impaired water identification rule is for determining whether waters should be listed as impaired, not for determining whether violations of water quality standards have occurred. Violations of water quality standards can be separately enforced through NPDES permits (in certain situations) or under the enforcement provisions in Arizona's water quality standards (see A.A.C. R18-11-120).

Response: The Department appreciates the comment.

Comment 8 - 15: Subsection (C)(2). As stated in our comments relative to the preamble, we once again question the reasoning behind ADEQ including exempt activities on the planning list. The reasons why our activities are exempt under the state water quality standards has to do with the fact that they are exempt for public health and safety reasons. It is for these reasons that these activities should not be regulated. If the TMDL rule changed those exempted activities it would/could endanger public health/safety defeating the purpose of the exemptions in the state water quality standards to begin with.

Response: The Department agrees with the commenter. As noted in comment 1 - 11 above, the rule language and the Preamble has been modified to show these waters subject to excursions as a result of exempt activities or due to natural background conditions will not be placed on either the Planning List or the 303(d) List for the specific, identified pollutant or activity that is causing the waterbody to be not attaining.

Comment 8 - 3: On page 536 of the preamble, a statement references "surface waters may be placed on the planning list for non-attainment of water quality standards when the exceedance is due to an activity exceeded in the standards

such as the physical or chemical maintenance of canals, drains or municipal park lakes, or the routine maintenance and operation of flood control structures or dams." We question the reasoning behind ADEQ including exempt activities on the planning list. The reasons why these activities are exempt under the state water quality standards has to do with the fact that they are exempt for public health and safety reasons. It is for these reasons that these activities should not be regulated. If the TMDL rule changed those exempted activities it would/could endanger public health/ safety.

Response: The Department agrees. The error has been corrected in the rule and in the Preamble. See response to comments 1 - 11 and 8 - 15 above.

Comment 9 - 1: Subsection (D). We commend ADEQ for developing a planning list that allows for further collection and analysis of current, credible, and scientifically defensible data when assessing the health of Arizona's water bodies. We support the planning list provisions of the proposed Rule which establish a minimum threshold of credible data that must be collected before a listing decision can be made by the Department. Given the potential social and economic consequences of a listing decision upon Arizona's citizenry, the listing process as outlined in these proposed rules more accurately identifies when impairment exists while being fully protective of aquatic communities.

Comment 10 - 1: We support the Planning List concept for waterbodies that lack sufficient water quality data or information to prevent inappropriately listing waterbodies. The Planning List concept is consistent with NRC's recommendation to EPA that it should consider what they termed a "Preliminary List" as a means to categorize waterbodies based on the level of knowledge and supporting scientific data available.

We strong support DEQ's Planning List concept as it is not only consistent with NRC's findings, but we believe it is a necessary first step towards identifying those waterbodies in need of immediate action versus those that need additional data and evaluation.

We believe that this approach will allow Arizona to focus its limited resources on TMDL development for actually impaired waterbodies, while at the same time identifying and developing the necessary data for Planning List waterbodies.

Comment 4 - 1: We would like to commend ADEQ staff in realizing the critical need for collection and analysis of current, credible, and scientifically defensible data when assessing the health of Arizona's water bodies. We know that it is imperative, given the potentially large social and economic impact of a listing decision upon the citizens of Arizona and the possible consequences to aquatic communities, that the listing process as outlined in these rules accurately identify when impairment exists. To this end, we support the Planning List (R18-11-604(D) provisions of the rule which provides for the collection of a minimum amount of credible data by the Department before a listing decision is made.

Comment 7 - 5: We strongly support ADEQ's decision to include a Planning List for waters where there is evidence of impairment but not adequate credible evidence to list the waters. Inclusion of a Planning List is consistent with the approach recommended in the National Research Council's congressionally mandated study of the TMDL program. See *Assessing the TMDL Approach to Water Quality Management*, at pp. 50-56. It also is consistent with the approach recommended in the *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* (categories 1-4 of that document are analogous to ADEQ's proposed planning list). Finally, the approach has been adopted in other states, including Florida (F.A.C. § 62-3-3.300 et seq.) and Texas (*Guidance for Assessing Texas Surface and Finished Drinking Water Quality Data, 2002* (October 2001),[29] at 49-58 (waters where fewer than 10 samples are available are not assessed but are identified for future monitoring).

The Planning List is a logical tool that will allow ADEQ to track waters for which adequate credible data is lacking but some data suggests impairment, and will let ADEQ target such waters for future monitoring to better assess potential impairment.

Comment 8 - 16: We like the planning list concept which is separate from the 303(d) List. This would/could allow for ADEQ and stakeholders to devote their time and resources to the most appropriate areas of concern.

Response: The Department appreciates the comments.

Comment 6 - 2a: R18-11-604. Although the addition of the planning list is an improvement, R18-11-604 still fails to recognize the different lists required by section 303(d).

Section 303(d) of the CWA recognizes three different lists: waters impaired under section 303(d)(1)(A); waters for which controls on thermal discharges are insufficient, section 303(d)(1)(B); and an information-only list of other waters that do not qualify for either of these lists but for which the state finds impaired water quality, section 303(d)(3). ADEQ's final rule should reflect the differences among these three lists.

Response: The Department agrees with the commenter that section 303(d) or the Clean Water Act requires states to identify several categories of impaired waters, but it doesn't require development of three separate lists. The submission of the 303(d) List to EPA must include the list of waters, the pollutants causing the impairment, and the priority ranking of the waters for TMDL development (see 40 CFR 130.7(d)). The differences between the categories of

waters will be provided in the submittal to EPA. The Department disagrees that the categories need to be codified in this rulemaking. No change has been made to the rule.

Comment 6 - 2b: These lists are not interchangeable. The listing criteria are different, the legal consequences of listing a water are different, the methods for eventual preparation of TMDLs are different, and there are different legal tools available for addressing water quality problems. As proposed, the rule will create confusion and uncertainty as to the proper procedures to follow in making the lists and how the waters on the lists will be regulated.

Response: The Department disagrees that the listing criteria and potential remedies are different based on these categories of waters. 40 CFR 130.7(b)(3) states that "[f]or the purposes of listing waters under 130.7(b), the term "water quality standards applicable to such waters" and "applicable water quality standards" refer to those water quality standards established under section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses and antidegradation requirements." 40 CFR 130.7(c)(1) continues with "[e]ach State shall establish TMDLs for the water quality limited segments in paragraph (b)(1) of the section... For pollutants other than heat, TMDLs shall be established at levels necessary to attain and maintain the applicable narrative and numeric water quality standards." Federal regulations require that all waterbodies must meet the appropriate criteria and uses assigned to it and TMDLs must be written to ensure attainment of those standards. The commenter is correct that there is latitude in the implementation of the TMDL allocations ranging for enforceable permit conditions to voluntary best management practices depending on the source and nature of the pollutant. No change has been made to the rule.

Comment 6 - 2c: The planning list is an improvement that we support. However, the basic thrust of the planning list in the proposed rule is for those waters that are believed to be impaired but which lack sufficient high quality data or where TMDLs are in various stages of development or implementation. That is fine as far as it goes and should be retained. However, section 303(d)(3) of the Clean Water Act provides for a list of waters where the impairment is due to causes not covered by section 303(d)(1)(A) of the Act. TMDLs are not required for the 303(d)(3) listed waters, which gives ADEQ much more flexibility to address those waters.

Response: The Department disagrees. Section 303(d)(3) of the Clean Water Act clearly calls for the development of TMDLs in citing that "[f]or the specific purpose of developing information, each state shall identify all waters within its boundaries which it has not identified under paragraph (1)(A) and (1)(B) of this subsection and estimate for these waters the total maximum daily load with seasonal variations and margins of safety for those pollutants which the Administrator identified under section 304(a)(2) as suitable for such calculation..." No change has been made to the rule.

Comment 6 - 2d: The very existence of the 303(d)(3) list verifies that the 303(d)(1)(A) list is not as all-encompassing as the proposed rule provides. The planning list addresses part of this concern but does not go far enough. As discussed throughout these comments, ADEQ should make two revisions. First, R18-11-604(A) should be revised to provide for the equivalent of a 303(d)(3) list. Second, R18-11-604(E) should be revised to limit what is now called the "303(d) list" in the proposed rule to cover only those waters impaired by pollutants, other than nonconventional, conventional and toxic pollutants, discharged from point sources subject to section 301(b)(1)(A) and (B) technologies. As discussed in more detail elsewhere in these comments, the reason that toxic, conventional and nonconventional pollutants are no longer covered by section 303(d)(1)(A) is that the Clean Water Act has been amended to regulate those pollutants under section 301(b)(2), which is not within the scope of the TMDL program of section 303(d).

Response: The commenter contends that impairments due to toxics, and conventional and nonconventional pollutants are not within the scope of the TMDL program. Or, conversely, that only those waters impaired by pollutants subject to effluent limitations required by section 301(b)(1)(A) and (B) of the Clean Water Act may be listed and ultimately addressed through the TMDL program. The Department disagrees with both conclusions.

As noted in numerous earlier comments, federal case law including Pronsolino v. Marcus, has established that "[s]ince all rivers and waters regardless of pollution source were included in the universe for which water-quality standards were required, all of them, again regardless of the source of pollution, were included in the universe for which listing and TMDLs were required – save and excluding only those for which effluent limitations would be sufficient to achieve compliance with standards." In Dioxin/Organochlorine Center v. Rasmussen, 37 ERC 1845, 1848m fn. 3 (W.D. Wash. 1993) the plaintiff contended that TMDLs were not authorized for toxic pollutants. The court did not agree, finding that sections 303(d) and 304(a) of the Clean Water Act refer to "pollutants" and do not exclude toxic pollutants. If a state has listed a water as impaired by toxic pollutants, EPA has the authority to implement TMDLs for that toxic pollutant. The definition of TMDL in 40 CFR 130.2(i) states that "TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure." No change has been made to the rule.

Comment 7 - 9: Subsection (D)(2)(c)(iii). The proposal states that waters included on the 1998 303(d) List, but for which there is not enough credible data to list as impaired under the new rules, can be placed on the Planning List.

See proposed R18-11-604(D)(2)(c)(iii). This approach is consistent with Arizona statutory requirements. See A.R.S. § 49-232(H). It is also not inconsistent with the 2002 EPA Listing Guidance. That guidance states on p. 3 that EPA will review carefully waters not included on a previous list, but does not preclude such removal.

Response: The Department agrees with the commenter's interpretation of federal guidance.

Comment 5 - 7: We believe any "threatened" waters should be placed on the 303(d) List period and that this rule inappropriately excludes them in subsection (D)(2)(i).

Response: Federal law and regulations are somewhat ambiguous regarding threatened waters. Federal rules require that states assemble and evaluate all existing and readily available data, including "waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards (40 CFR 130.7((b)(5)(ii))," but section 303(d) of the Clean Water Act is silent on threatened waters. The *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* suggests that current rules require states to include threatened waters on the 303(d) List but as noted above, there is no clear federal authority. The final July, 2000 TMDL rule (now suspended) did not require states to list threatened waters. Given this understandable uncertainty regarding the ultimate fate of threatened waters, the rule provides for placing threatened waters on either the Planning List (R18-11-604(D)(2)(i)) or the 303(d) List (R18-11-604(E)(1)(b)), depending on whether, at the time the Department submits its final list to EPA, federal rules required threatened waters to be listed.

Comment 7 - 10: The proposal indicates that threatened waters (i.e., those not currently impaired but that might be impaired by the time of the next listing cycle) will be included on the impaired waters list only if federal regulations in effect at the time the list is submitted require it. See proposed R18-11-604(D)(2)(ii).

CWA § 303(d)(1)(a) says nothing about threatened waters, nor does the Arizona TMDL statute. Current EPA rules (40 C.F.R. Part 130) are ambiguous; no mention is made of threatened waters *per se*, but some (though not all) provisions do seem to require consideration of waters that may be impacted in the future. The 2002 EPA Listing Guidance takes the position that the current rules require the state to include threatened waters on their 303(d) lists, but this is debatable for the reasons indicated above (lack of clear statutory or regulatory authority). Moreover, EPA may be moving away from this position. The final (since suspended) EPA TMDL rule revision did not require that states list threatened waters. See 65 Fed. Reg. at 43605-06 (explanation of decision not to require listing of threatened waters).

We support ADEQ's approach and its conclusion in the preamble (8 A.A.R. 537) that current federal regulations do not require that threatened waters be included on the 303(d) List. Texas has reached a similar conclusion. See Attachment 2 (p. 7, item 9) and Attachment 7 (p. 49). The appropriate place for these waters is the Planning List because threatened waters are protected by another state-implemented CWA program: antidegradation (see A.A.C. R18-11-107). Nevertheless, if this conclusion is incorrect, the proposed rule gives ADEQ the flexibility to act accordingly.

Response: The Department appreciates the comment.

Comment 8 - 17: Why wasn't airborne deposition included as a component of the listing decisions? Air quality data is always overlooked. Airborne deposition is one potential source of input into our waterbodies that could seriously affect loadings. EPA have acknowledged in the federal rule that airborne deposition could play a major role in TMDL establishment. As such, we believe sources of air quality data should also be evaluated to look at potential listings for waterbodies or segments.

Response: The Department believes that airborne deposition, to the extent that it can be considered in the assessment process, is included under "anthropogenic influences in the watershed" under R18-11-605(B)(2)(c)(i). The impact of airborne deposition on a surface water or segment is more likely to be investigated as part of the source identification process in a TMDL investigation. In the weight-of-evidence approach to evaluating water quality, it would be considered as a possible source but actually verifying and quantifying the impact is beyond the scope of evaluating a waterbody for impairment. No change has been made to the rule.

R18-11-605. Evaluating a Surface Water or Segment for Listing and Delisting

General Comments

Comment 7 - 31: EPA Region 9's comments on the proposed rule recognize that the proposal adequately addresses several of EPA's prior concerns that were raised in its comments on ADEQ's previous proposal. In addition, as ADEQ is aware, we responded to the concerns raised by EPA on the previous proposal in a letter dated January 3, 2002 (included as Attachment 1). A copy of that letter is attached to ensure that it becomes part of the record for this rulemaking because EPA has incorporated by reference its earlier comments and several of EPA's concerns with the proposed rule have not changed significantly.

In addition to our January 3, 2002 letter in response to EPA's previous comments (as noted above, many of the comments in the January 3, 2002 letter address the new or ongoing issues raised by EPA), we provide the following in response to EPA's new or ongoing concerns.

Response: The Department appreciates the comment and the specific responses to sections addressed have been moved to the appropriate Section for response.

Comment 6 - 7: The listing criteria in R18-11-605 are broader than required under section 303(d)(1)(A) of the CWA.

As discussed above, section 303(d) provides for three lists of impaired waters. The factors in proposed R18-11-605 may be appropriate for listing a water under section 303(d)(3), but are too broad for listing under section 303(d)(1)(A).

Following the canons for interpreting statutes shows that listing of impaired waters under section 303(d)(1)(A) of the CWA was limited to including waters not meeting water quality standards for the pollutants subject to the effluent limitations required by sections 301(b)(1)(A) and (B). Statutes are interpreted as a whole in an effort to understand congressional intent.

The CWA provides for no fewer than nine different lists of waters that do not meet water quality standards for one reason or another. *See*, section 302 (waters impaired due to deficiencies in effluent limitations required by section 301(b)(2) or identified under section 304(*l*)); section 303(d)(1)(A) (waters impaired due to deficiencies in effluent limitations required by sections 301(b)(1)(A) and (B)); section 303(d)(1)(B) (waters impaired by excessive thermal loads); section 303(d)(3) (waters impaired that do not qualify for listing under sections 303(d)(1)(A) or (B)); section 304(*l*) (three lists of waters impaired by toxic pollutants discharged by point sources subject to section 301(b)(2)); section 305(b) (requiring various reports and lists of waters not meeting water quality standards or where designated uses are not attained; and section 314 (list of publicly owned lakes suffering from eutrophication and certain other water quality problems). Each list has a defined scope and a specified response. ADEQ's proposed rule errs by collapsing all of these lists into section 303(d)(1)(A) and subjecting them all to the TMDL process. If Congress had wanted that result, it would have specifically so provided in the statute.

ADEQ has no legal basis to delete words of limitation from section 303(d)(1)(A). Section 303(d)(1)(A) requires listing of "waters … for which the effluent limitations *required by* section 301(b)(1)(A) and section 301(b)(1)(B) … are not stringent enough to implement any water quality standard applicable to such waters." (Emphasis added.) This section addresses only those impairments that are caused by pollutants subject to the effluent limitations "required by" sections 301(b)(1)(A) and (B) in the Act. These terms limit the scope of section 303(d)(1)(A).

ADEQ is entitled to no deference for its expansion of section 303(d)(1)(A) to include all technology-based effluent limitations. Even if the statute is ambiguous in describing how the two types of effluent limitations come into play in a listing decision, a point we do not concede, the statute unambiguously limits the listing decision to only those effluent limitations "required by section 301(b)(1)(A) and section 301(b)(1)(B)." *See, Whitman v. American Trucking Ass'ns*, 531 U.S. 457, 121 S.Ct. 903, 918-19 (2001)(although there was ambiguity on how two subsections of the statute interrelated, "the EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion.")

The definition of the term "effluent limitation" means "any restriction" on the "amount" of "constituents which are discharged from point sources…." Section 502(11). The definition of "discharge" means the addition of "any pollutant … from any point source…." Section 502(12). Plugging in these definitions into 303(d)(1)(A) as if solving an algebra problem shows the limited scope of section 303(d)(1)(A):

Each state must list those waters … for which the restrictions on the discharge of pollutants from point sources required by section 301(b)(1)(A) and section 301(b)(1)(B) … are not stringent enough to implement any water quality standard applicable to such waters.

Thus, section 303(d)(1)(A) does not look at impairments caused by all pollutants, but only those pollutants subject to "effluent limitations *required by* section 301(b)(1)(A) and section 301(b)(1)(B)." (Emphasis added.) This is a shorthand way of identifying the pollutants that may trigger the listing requirement because the definitions of the effluent limitations specify the pollutants to which the limitations apply. The covered pollutants are those subject to the effluent limitations required by sections 301(b)(1)(A) and (B).

Notably missing from 303(d)(1)(A) is any reference to effluent limitations required by sections 301(b)(1)(C), 301(b)(2), 306, 307, and 402(p). These omissions are significant and cannot be ignored. One important conclusion is that impairments caused by toxic pollutants and pollutants regulated under section 301(b)(2) are remedied under section 302, not 303(d)(1)(A).

The pollutants covered by effluent limitations set under sections 306 and 307 are also subject to section 301(b)(2) effluent limitations. The omission of any reference to 306 and 307 from 303(d) in section 303(d)(1) supports the conclusion that Congress was looking at ***pollutants***, not ***technology*** in 303(d)(1)(A) listing decisions.

The omission of section 301(b)(1)(C) from section 303(d)(1) makes sense given that Congress is looking for impairments caused by certain pollutants rather than technology. It would have been a logical absurdity to reference

301(b)(1)(C) in the listing sentence of 303(d)(1)(A), for any effluent limitation that meets water quality standards will, by definition, be stringent enough to implement the standard.

The omission of a reference to section 301(b)(2) is substantive and is one of the strongest indications that listing decisions under section 303(d)(1) do not apply to toxic pollutants. Where effluent limitations on pollutants subject to 301(b)(2) are not stringent enough, additional water quality-based limitations are set under section 302, not section 303(d)(1).

Sections 302 and 303 were enacted as part of the same bill in 1972. At that time, section 302 read in pertinent part: "Whenever … discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 301(b)(2) … would interfere with the attainment or maintenance of that water quality…." Pub. Law 92-500, 86 Stat. 816, 846 (1972). The fact that Congress specifically included section 301(b)(2) in section 302 while omitting any such reference in section 303(d)(1)(A) is significant. The words of the statute cannot be ignored.

In 1987, section 302 was amended to include a reference to waters identified as impaired under one of the three lists required by section 304(*l*). Section 304(*l*) covered only those impairments caused by toxic pollutants and 302(b)(2)-regulated pollutants. If Congress thought 304(*l*)- and 301(b)(2)-regulated pollutants were subject to section 303(d)(1)(A), references to those sections would have been placed in section 303(d)(1)(A), not in section 302.

The original scope of 303(d)(1)(A) was narrow in 1972 and has been narrowed further by subsequent legislation. In 1972, the effluent limitations required by section 301(b)(1)(A) covered both BPT and pretreatment standards for discharges into POTWs. The inclusion of pretreatment standards was subsequently deleted. Now, pretreatment is covered exclusively under section 307, which is not subject to section 303(d)(1)(A).

The scope of section 303(d)(1)(A) was further narrowed when new effluent limits for toxic, conventional and nonconventional pollutants were specifically mandated by new subparagraphs in 301(b)(2)(C) through (F). Since effluent limitations for these pollutants are not "required by section 301(b)(1)(A)," these pollutants no longer are within the scope of section 303(d)(1)(A).

In 1972, section 301(b)(1)(B) applied to "effluent limitations based upon secondary treatment." The wording is significant for POTWs. First, section 301(b)(2)(B) of the 1972 Act required POTWs to upgrade to the level of treatment then required by section 201(g)(2)(A). If Congress had wanted 303(d)(1)(A) listing decisions where POTWs had upgraded beyond secondary treatment, it would have done one of two things: Either 303(d)(1)(A) would have referred to effluent limitations required by section 301(b)(2)(B), or the upgrade requirement in 301(b)(2)(B) would have been included in section 301(b)(1)(B). That Congress did not choose either option is powerful evidence that the 303(d)(1)(A) listing decision is not based on pollutants limited by advanced treatment at POTWs. The upgrade requirement in section 301(b)(2)(B) was repealed in 1981.

Second, section 301(b)(1)(B) refers to effluent limitations "based on" secondary treatment. Unlike other effluent limitations required by section 301(b), secondary treatment is a performance-based standard that focuses on the characteristics of the discharge more than on control of specific pollutants. Thus, if a POTW is meeting the performance-based standards of secondary treatment, pollutants in a POTW discharge are not a basis for a 303(d)(1)(A) listing.

From the foregoing, we conclude the following:

* The listing requirement in section 303(d)(1)(A) applies only to waters that are impaired by point source discharges of pollutants.
* Since the term "pollutant" does not include flow, toxicity, dissolved oxygen, BOD, sediment already in the river, or other ecological characteristics, section 502(6), these factors should not be considered under 303(d)(1)(A).
* Section 303(d)(1)(A) requires a comparison of ambient water quality for individual pollutants against the water quality standards. This section uses the word "stringent" in a way that can only mean there is a comparison of two things: "for which the effluent limitations … are not stringent enough to implement any water quality standard applicable to such waters." Section 303(d)(1)(A). The stringency of the effluent limitation to attain individual standards cannot be assessed without this comparison.

In conclusion, Congress constructed a comprehensive program that provides several different responses where the various technology-based requirements of the 1972 CWA were insufficient to attain water quality standards for the pollutants subject to those requirements. However, Congress did not provide that section 303(d)(1)(A) is the tool to fix all of the potential water quality problems. Instead, Congress provided for at least nine different lists of impaired waters with multiple tools to solve different problems under different sections of the CWA. There is no legal basis to ignore the fact that the CWA addresses different water quality problems under different sections and provides different solutions for each problem. There is no statutory basis to merge everything into section 303(d)(1)(A).

Response: Most of the issues raised by this commenter or others are addressed elsewhere in this document but due to the number of issues raised in the one comment, the response is repeated here.

First, the commenter contends that section 303(d)(1)(A) of the Clean Water Act addresses only those impairments that are caused by pollutants subject to the effluent limitations 'required by' sections 301(b)(1)(A) and (B) of the

Clean Water Act and, therefore, only waters not meeting water quality standards for pollutants subject to these effluent limitations can be listed. Since effluent limitations are a component of the NPDES permitting program, which governs the discharge of pollutants to waters of the United States from point sources, the commenter reasons that the listing requirement in 303(d)(1)(A) applies only to waters that are impaired by point source discharges of pollutants. The argument suggests that if a POTW (a point source discharger) is meeting the performance-based standards of secondary treatment, as required under the NPDES program (40 CFR 133), the pollutants in the POTW discharge are not a basis for a 303(d)(1)(A) listing. Each of these is contrary to the recent federal case Pronsolino v. Marcus, 91 F. Supp. 2d 1337 (N.D. Cal. 2000) where in their opening brief, the plaintiffs contended that the listing and TMDL requirements of section 303(d) were 'exclusively reserved for point sources'... and that 'section 303(d) focuses solely on point sources'... The plaintiff went on to argue that "[a] water polluted only by logging runoff or other nonpoint sources of pollution, like the Garcia River, should not be listed and no TMDL should be prepared." The court rejected the plaintiffs arguments stating "[s]ince all rivers and waters regardless of pollution source were included in the universe for which water quality standards were required, all of them, again regardless of the source of pollution, were included in the universe for which listing and TMDLs were required, save and excluding only those for which effluent limitations would be sufficient to achieve compliance with standards." The court continued, "[f]or every substandard navigable river or water, congress sought a determination whether the central innovation of the 1972 Act, technology-driven limits on effluent, would be sufficient to achieve compliance. If not, the river or water was required to go on a list of unfinished business and a TMDL calculation was required... no substandard river or water was immune by reason of its sources of pollution... TMDLs were required for all listed rivers and waters, at least as to pollutants identified by EPA as suitable for such calculation."

Second, the commenter suggests that since the term "pollution" does not include flow, toxicity, dissolved oxygen (DO), biochemical oxygen demand (BOD), or other ecological characteristics, these factors should not be considered under 303(d)(1)(A). The Department believes this statement misinterprets the breadth of the term "pollutant" and the factors to be considered when listing waters under section 303(d)(1)(A). EPA and the courts routinely recognize several of the cited "factors" as "pollutants" in the context of the Clean Water Act. (See that 40 CFR 401.16 definition of conventional pollutant that includes BOD and pH.) Numerous court cases support the concept that these factors are pollutants: Piney Run Preservation Ass'n v. County Com'rs of Carroll County, 268 F. 3d 255 (4th Cir. 2001) (DO); In Re Advanced Electronics, Inc., 2000 WL 1738750 (EPA, 2000) (pH); In Re Ketchikan Pulp Co., 7 E.A.D. 605 (EPA, 1998) (BOD). EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*, says that when implementing section 303(d)(1)(A), the factors to be considered when listing are not limited to 'pollutants' "if the impairment is not caused by a pollutant" (see page 6 of the guidance document).

Third, the commenter is correct that 303(d)(1)(A) requires a comparison of ambient water quality for individual pollutants against the water quality standards. For the reasons noted under the Pronsolino case, the Department disagrees that the term stringent can only refer to effluent limitations from point source dischargers. The point of section 303(d) is to evaluate whether surface waters are meeting water quality standards and supporting their designated uses. If surface waters do not support their standards and uses, both state and federal statute support that the surface water may be listed as impaired and a TMDL study undertaken.

Comment 6 - 1: Proposed R18-11-605 exceeds the scope of both state law and section 303(d) of the Clean Water Act in several key respects. The state criteria for listing impaired waters must be no broader than the criteria used under section 303(d). A.R.S. § 49-232(A). A water is impaired under state law only if it is impaired under section 303(d) and the applicable federal rules. A.R.S. § 49-231(1). Comments A through F will focus on the scope of section 303(d) of the CWA in order to show how the proposed rule goes beyond the scope of both state and federal law. As a solution, we recommend adding this sentence to the beginning of section 605(B):

"Navigable waters will be listed under this section where the effluent limitations required by section 301(b)(1)(A) and section 301(b)(1)(B) of the Clean Water Act are not stringent enough to implement any water quality standard applicable to such waters."

Response: The Department disagrees that this rulemaking is more restrictive than both state and federal statutory requirements. The Department also finds neither statutory nor regulatory constraints (state or federal) prohibiting the use of listing criteria more environmentally protective than the criteria in section 303(d) of the Clean Water Act or 40 CFR 130.7. A.R.S. § 49-232(A) states that the Department "shall prepare a list of impaired waters for the purpose of complying with section 303(d) of the Clean Water Act." A.R.S. § 49-231(1) defines "impaired water" as:

> "A navigable water for which credible scientific data exists that satisfied the requirement of § 49-232(A) and that demonstrates that the water should be identified pursuant to (303(d) of the CWA) and the regulations implementing that statute."

A.R.S. §§ 49-232(A) and 49-231(1) establish criteria which, when met, require that a water be listed. There is no requirement that establishes that a water cannot be listed for criteria other than for federal criteria, as the commenter contends. States have listed waters using criteria more stringent than the minimums required by EPA regulations. Section 303(d) of the Clean Water Act provides states with discretion to list impaired waters. Section 510 of the Clean Water Act authorizes states to adopt more stringent pollution controls that may not be required to be included by current EPA regulations when including waters on their section 303(d) Lists. EPA's regulations do not compel the

Department to disapprove the state's list because of the inclusion of these waters. If waters can only be listed based on federal criteria, there would be no need to submit the state's assessment and listing methodology with each 303(d) listing submission. No change has been made to the rule.

Weight-of-evidence Approach

Comment 5 - 8: We agree that the higher quality data should be given higher priority when making a listing or delisting decision as indicated in section (B)(1)(c).

Response: The Department appreciates the comment.

Comment 4 - 2: We commend ADEQ for implementing a weight-of-evidence process (R18-11-605(B)) in determining impairment of a waterbody. ADEQ is correct in its determination that multiple indicators of water quality including biological, physical, and chemical data must be evaluated, as well as, the evaluation of other information including the role of soil, geology, hydrology, flow regime, natural processes, anthropogenic influences, the characteristics of the stressor, the age of the data, how it was collected, and climatic conditions at the time of sampling. The Department also correctly notes that the recurrence, persistence, and seasonality of an occurrence must also be taken into consideration in evaluating waterbody impairment.

Response: The Department appreciates the comment.

Comment 7 - 3: Subsection (B). We strongly support the weight-of-evidence approach contained in proposed R18-11-605(B), though we have some questions regarding the newly proposed subsection (B)(3), as outlined below. A weight-of-evidence approach is in our minds the most logical approach as types of water quality data increase and data conflicts or inconsistencies become more common. ADEQ needs to be able to evaluate the weight to give to data that meets data quality requirements but may not be internally consistent, and also needs to be able to factor in all other data mentioned in R18-11-605(B)(2)(c) (e.g., site-specific geophysical data), in making decisions regarding the status of waters.

Moreover, Arizona's water quality criteria generally have been (and will continue to be) adopted for general classes of waters,[30] and may therefore be inappropriate when applied to specific waters or segments (e.g., waters in highly mineralized areas). ADEQ therefore needs to be able to evaluate all credible evidence and weigh that evidence in determining whether a water is truly impaired.

The reasons why we believe a weight-of-evidence approach is legally justified are set forth in greater detail in our January 3, 2002 letter to ADEQ (included as Attachment 1). Nothing in EPA's TMDL or water quality standards regulations precludes a weight-of-evidence approach. EPA itself, while generally favoring a concept of independent applicability, indicated in the water quality standards ANPRM that it is considering the merits of a weight-of-evidence approach. See 63 Fed. Reg. 36742, 36796-99 (July 7, 1998).[31]

In addition, other states appear to utilize a weight-of-evidence approach, even if it not always called by that name. For example, Texas has indicated that in a case where biological data showed no impairment but chemical data (dissolved oxygen measurements) suggested impairment, it probably would not list a water (assuming both data are equally reliable) because the biological data is thought to be more accurately reflective of the stream's condition. See *Public Comment on the 2002 "Draft Guidance for Assessing Texas Surface and Finished Drinking Water Quality Data" and "Draft Methodology for Developing the Texas List of Impaired Water Bodies"* (August 21, 2001), at 7 (response to comment 7) (included as Attachment 2); *Methodology for Developing the Texas List of Impaired Water Bodies"* (August 1, 2001), at 3 (included as Attachment 3). This is a weight-of-evidence approach in all but name.

Similarly, the most recent Colorado assessment guidance contains the following statements:

"The WQCD, in interpreting physical and biological information, will give site-specific consideration to the applicability of the protocols in use and available metadata gathered to validate the information generated, the extent and nature of expertise of the observer, and the ***relative weight*** of the evidence presented." (p. 4, emphasis added)

"Application of chemical, physical and biological information in assessment determinations requires consideration of the scientific rigor of the methodologies utilized to develop any such information, and the strength of that information. The WQCD will consider the ***rigor and strength*** of chemical, physical, and/or biological information. Rigor refers to the demonstrated validity of sampling, analytical and assessment protocols and the availability of meta-data in support of those protocols. Strength refers to the quantity of data and the extent to which such data demonstrates clear and convincing evidence of attainment or non-attainment of standards." (p. 5, emphasis added)

See *Unified Assessment Methodology, Water Quality Control Division* (November 2001 draft) (included as Attachment 4). Again, while not as explicit or detailed as Arizona's proposal, this approach clearly incorporates the same fundamental concepts. For these reasons and those outlined in greater detail in Attachment 1, the weight-of-evidence test is both scientifically and legally justified.

Response: The Department appreciates the comment.

Comment 9 - 2: We commend ADEQ for incorporating the concept of a 'weight-of-evidence' approach into the process for determining whether or not a surface water or stream segment is impaired.

In the preamble to the proposed rule, ADEQ defines 'weight-of evidence' as an "approach to assessments and listing, where the strengths and limitations of each dataset are weighed and considered."[40] Further, a "surface water is not, by default, impaired because one dataset indicates possible impairment, while another dataset shows it attaining its uses."[41] When evaluating the data, the Department will consider: data collected under critical conditions; preferential status of higher quality data (age, frequency and direct measure of impact); and whether data indicates impairment due to persistent, recurrent or seasonal conditions. Under the 'weight-of-evidence' approach, the Department will "evaluate: (1) the numeric data for exceedances of numeric water quality standards, (2) data for exceedances of narrative water quality standards; and (3) other relevant information when making its determination whether the exceedance results in an impairment that is recurring, persistent, or seasonal in nature."[42]

Response: The Department appreciates the comment.

Comment 7 - 21: Subsection (B)(1)(c)(ii). We are still not sure what is meant by data that "provides a direct measure of an impact on a designated use." See R18-11-605(B)(1)(c)(ii). We request that ADEQ clarify what it means by this term, either in the rule or in the preamble.

Response: Certain numeric surface water quality standards measure direct impacts to human health and aquatic life, for example, ammonia, while others, such as turbidity are surrogate indicators of impairment. Ammonia is a pollutant routinely found in wastewater treatment plant effluents, landfill leachate, and agricultural runoff from fields and is known to have toxic effects on aquatic life (See *Update of Ambient Water Quality Criteria for Ammonia*, EPA, OWOW, EPA-822-R-99-017, December, 1999.)

Arizona's current surface water quality standard for turbidity is to maintain and protect water quality for aquatic life. The water quality issues regarding turbidity are many, including when an excess of finely suspended particles settle to fill in void spaces in the substrate that deprive aquatic life of those spaces or excessive turbidity levels that can mask prey as well as predators thereby affecting food cycles in the surface water. These impacts are real and discernible but the absolute "level" at which they occur in not well understood. Turbidity is a qualitative measure of water clarity or opacity. It is an expression of the optical property that causes light to be scattered and absorbed rather than transmitted. As a qualitative measurement, turbidity gives only a relative assessment of particulate loading in the surface water. Turbidity is, therefore, a surrogate measure for estimating the amount of suspended solids that are in the water. The Preamble has been revised to include this clarification.

Comment 6 - 5: Proposed R18-11-605(B)(2)(c) and (d) go beyond section 303(d).

Proposed R18-11-605(B)(2) sets forth the criteria that will be used to determine whether a water quality standard is impaired for purposes of listing under section 303(d) of the CWA. We support basing the listing decision on attainment of numeric and narrative water quality standards as provided in subsections R18-11-605(B)(2)(a) and (b). However, subsections (c) and (d) do not identify impairment of water quality standards. The factors in those subsections are the factors that are supposed to be considered when promulgating water quality standards, but are not themselves water quality standards. A.R.S. §§ 49-221(C) through (E), and 49-422(C).

Section 303(d)(1)(A) provides that a water may be listed only where certain effluent limitations "are not stringent enough to implement any water quality standard…" By definition, a water quality standard is a concentration of a pollutant in the water itself, not the quality of sediment, fish tissue, plants and other ecological parameters that come in contact with the water. *See*, A.R.S. § 49-221(A) ("The director shall adopt... water quality standards for all navigable waters….") and 49-222(A) ("standards for the quality of navigable waters shall assure water quality….") EPA regulations for water quality standards provide that such standards define "water quality goals" to "enhance the quality of water." 40 C.F.R. § 130.3. Thus, the standards apply to the water, not the entire ecosystem.

ADEQ's history of setting water quality standards confirms that the agency has historically interpreted water quality standards as applying only to the water. ADEQ has considered the uses of the water for agricultural and municipal/industrial uses, as well as whether the quality of the water would support aquatic organisms such as fish and amphibians. ADEQ is also required to consider the economic, environmental and social costs and benefits of the standard as applied to the quality of the water. *See*, A.R.S. § 49-221(B) and (C) (listing the factors to be considered when setting water quality standards). Moreover, the statute for the impaired waters rule defines "impaired waters" solely in terms of the quality of the water. A.R.S. § 49-231(1). Compliance with the narrative water quality standard for toxicity has historically been limited to assessing the effect of pollutants in the water. The whole effluent toxicity test is conducted with aqueous samples, not samples of dirt, grass or fish tissue.

ADEQ has never, to our knowledge, considered the use and value of things like trees, grass, sand and gravel when setting water quality standards. Trees are protected by setting standards for contaminants in the water, not on the basis of contaminant loading in tree bark and leaves. Surely the Legislature would have made an explicit reference to non-water substances if it believed that water quality standards applied to something other than water. This issue is so fundamental that it would not have been addressed by silence.

We are not aware of a single instance where ADEQ has applied the statutory factors for water quality standards to anything other than the water. Similarly, we are not aware of anything in EPA's literature that was extant when the 40 C.F.R. Parts 130 and 131 rules were promulgated suggesting that standards must be set for contaminants in substances other than water. Thus, subsections R18-11-605(B)(2)(c) and (d) should be deleted as inconsistent with and beyond the scope of the water quality standards that are the basis for listing under section 303(d).

Response: The Department disagrees. It is plainly permissible for the Department to consider the factors listed in R18-11-605(B)(2)(c) and (B)(2)(d) when it determines whether a water is impaired. These subsections are designed to ensure that the information and data referenced in 40 CFR 130.7(b)(5) is assembled and evaluated so that the resultant lists are accurate. This is supported in Sierra Club v. Hankinson, 939 F. Supp. 865, 870 (N.D. La. 1996) where the Court's concern that the state (Georgia) had failed to use "all existing readily available water quality-related data and information... such as Discharge Monitoring Reports, Quarterly Noncompliance Reports, and available EPA databases, including 'Biological Information Systems' and 'Ocean Data Evaluation System,' when formulating its list of impaired waters."

The Department also disagrees with the commenter's assertion that A.R.S. § 49-231(1) defines impaired waters solely in terms of water quality. This comment is apparently predicated on the contention that a water quality standard refers solely to the concentration of a pollutant in the water itself. This tends to describe water quality standards too narrowly:

1. The contention fails to recognize that a water quality standard includes a water's uses that must be protected, and not merely the criteria necessary to protect the uses. 40 CFR 130.7(b)(3) states "[f]or the purposes of listing waters under § 130.7(b), the term 'water quality standard applicable to such waters' and 'applicable water quality standards' refer to those water quality standards established under section 303 of the Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements."
2. The premise that criteria in a standard is related to the concentration of the pollutant in the water disregards the fact that water quality criteria can be, and often are, expressed in terms other than a 'concentration.' In addition, 40 CFR130.3, 40 CFR 131.2, 40 CFR 131.3, 40 CFR 131.10 and 40 CFR 131.11. A.A.C. R18-11-101(16) defines "criteria" as follows:

"Criteria" means elements of water quality standards that are expressed as pollutant concentrations, levels or narrative statements representing a water quality that supports a designated use."

Narrative standards refer to conditions of a surface water, such as occurrence of objectionable odor, off-taste in drinking water, change in color, and formation of bottom deposits.

The commenter contends that the water quality standard for the toxicity (R18-11-108(5)) has "historically been limited to assessing the effect of pollutants in the water" and uses the example of the whole effluent toxicity (WET) test. It is true that the Department's previous narrative toxicity implementation guidance discussed the use of WET testing for use in NPDES permit compliance. The commenter fails to acknowledge the breadth of the narrative toxics standard which requires "a surface water to be free from pollutants in amounts or combinations that are toxic to humans, animals, plants, or other organisms.' Another narrative require the surface be free from pollutants... 'cause off-flavor in aquatic organisms or waterfowl.' These water quality standards have been in place for a number of years and are subject to public review and comment before approval by EPA and clearly suggest the use of data other than solely water chemistry data to protect the uses. No change has been made to the rule.

Comment 1 - 6a (October 4, 2001 comment letter): The "weight-of-evidence" approach in subsection (B)(1) does not explain how the Department will consider multiple lines of evidence in making listing decisions. It appears, based partly on language in the preamble, that the Department may not list waters where a single line of evidence is sufficient to demonstrate a water quality standards exceedance. We understand from conversations with Department staff that this is not the Department's intent. There is no basis in state standards or federal regulations to require multiple lines of evidence to support a determination that a water is impaired or threatened. Water quality standards must be applied independently for listing assessment purposes. In addition, instances may arise where no single line of evidence is sufficient to support a listing decision, yet information from several lines of evidence combines to provide a basis to list a waterbody. We strongly encourage the Department to adopt this perspective to a weight-of-evidence approach, and clarify how this section will be applied consistent with this perspective.

Response: This comment was made on an earlier rule draft. The Department added subsection (B)(3) within the weight-of-evidence approach to provide an opportunity for the Department to consider a single line of water quality evidence where the evidence is sufficient to determine that the surface water is either impaired or not attaining. The Department has specifically placed this provision within the weight-of-evidence subsection so that presumed impairment based on one type of data are done only after careful evaluation of the reliability, amount, and quality of the data as well as examination of linkages between these types of data and the designated uses to be protected. The weight-of-evidence specifically allows for consideration of several lines of evidence when no one single line clearly indicates impairment.

Other commenters have raised concerns with the suggested "independent applicability policy" whereby each type of information is treated independently when making impairment determinations. The commenter states that there are

no federal mandates requiring multiple lines of evidence. Likewise, states have found no federal requirements that preclude the weight-of-evidence or multiple lines of evidence approach. Other states, both in Region 9 and other EPA regions, use the weight-of-evidence approach.

Comment 7 - 11: Subsection (B)(3). ADEQ has included language in the proposal stating that it may consider a single line of water quality evidence in determining impairment. See proposed R18-11-605(B)(3). We have several questions regarding this language.

(a) Although it is implicit, we believe it should be explicitly stated that the evidence from the "single line" has to meet credible data requirements in order to serve as a basis for listing. This could be done by adding the phrase "credible and scientifically defensible" (a defined term in the proposal) before the phrase "water quality evidence."

(b) ADEQ should further clarify the intent behind this language. We have never believed that the weight-of evidence test requires ADEQ to gather all potential types of evidence (chemical, biological, etc.) before listing any water (i.e., to generate different types of data if one type is already available), though this might be the ideal situation. If the language is merely intended to clarify that point, it is unobjectionable. If only one line of credible evidence exists, and that line clearly demonstrates impairment, listing may be appropriate.

Furthermore, we have also never believed that the weight-of evidence test precludes ADEQ from listing a water if impairment is only shown by one line of evidence when multiple lines are available. If chemical and physical data differ, then ADEQ should evaluate the relative strength of each and make its decision based on that evaluation, using the factors specified in the proposed rule to determine which line of evidence should be determinative. Agreement among all credible data, while preferred, is not a prerequisite to listing.

Our concern is that the language could also be read as requiring listing when any evidence indicates impairment, even if other, stronger evidence indicates attainment. We do not think this is ADEQ's intent, given the use of discretionary language in the proposal (ADEQ "may consider" the evidence) and the preamble,[32] but it seems possible that the rule could be read this way. We ask ADEQ to further clarify, either in the preamble or the rule itself, that the existence of any credible evidence of impairment does not mandate a listing in a case where the Department determines that other, more reliable evidence shows non-impairment. This goes to the heart of the weight-of-evidence approach, which we believe is both reasonable and legally justified, as explained above.

Response: As noted in the response to Comment 1 - 6a above, the Department has specifically placed this provision within the weight-of-evidence subsection so that presumed impairment based on one type of data are done only after careful evaluation of the reliability, amount, and quality of the data as well as examination of linkages between these types of data and the designated uses to be protected. The weight-of-evidence specifically allows for consideration of several lines of evidence when no one single line clearly indicates impairment. Alternately, the weight-of-evidence approach doesn't preclude the state from using only one data type in making a listing decision if that dataset is of adequate size and quality, for example credible and scientifically defensible.

Requiring that the Department use credible and scientifically defensible data when evaluating a surface water for listing (or delisting) is found under R18-11-605(A). It is not necessary to repeat it within the subsection. The rule language does not "require" a listing based on the single line of evidence, it states that the Department "may consider" as part of the weight-of-evidence, a single line of evidence if the evidence is, as stated in the Preamble 'clear and convincing.' All the consideration in subsection (B) will be applicable, including the following:

- Does the data reflect critical conditions?
- Does it show persistent, seasonal or recurrent impairment?
- Is it newer data or of higher quality than previous data?

It is important to note than when conducting a water quality assessment, there needs to be a full suite of core parameters to ensure that all designated uses are being supported. Conversely, when determining impairment, one parameter can result in a finding of impairment provided there is sufficient credible and scientifically defensible data available as required in this rulemaking.

Comment 9 - 3: All of the above factors cited by the Department as their 'weight-of-evidence' approach, are insightful and appropriate to the process for accurately determining the true water quality state of impairment or health of Arizona's surface waters and stream segments. We support the theory of 'weight-of-evidence' as outlined by the Department, *supra*. Unfortunately, however, the Department seemingly negates the entire 'weight-of-evidence' approach in R18-11-605(B)(3)[43]. Despite the detailed nature of a carefully considered 'weight-of-evidence' approach that is provided for in the preamble to the rule, the Department may disregard the findings of this approach and make a determination based upon a 'single line of evidence.'[44]

R18-11-605(B)(3) should be stricken from the proposed rule as controverting the 'weight-of-evidence' approach. The incorporation of the 'single line of evidence' approach should be removed from the proposed rules. Although it is not defined in the rule, the preamble states that impairment for a 'single line of evidence' will be based on data that provides "clear and convincing evidence of impairment or non-attainment."[45] Despite its inclusion under the 'weight-of-

evidence' section of the proposed rules, the 'single line of evidence' approach is an exception to the rule which clearly negates the comprehensive nature of the 'weight-of-evidence' approach. Further, the proposed rules fail to set forth any scientifically defensible methodology or criteria as required under Arizona law, for determining whether or not a 'single line of evidence' is 'clear and convincing evidence of impairment.'[46]

Given the gravity of the consequences inherent in the arbitrary or 'carte blanche' approach associated with findings based upon a single line of evidence, the point and non-point sources are entitled by law to have clearly defined criteria for determining impairment status of a surface water or stream segment. Additionally, the sweeping nature of the 'single line of evidence' approach seemingly allows for an impairment listing despite controverting or contrary evidence. Therefore, we respectfully requests that the Department excise all reference to R18-11-605(B)(3) from the proposed rules as being vague, over-broad and contrary to the authorizing statutes.[47]

Comment 4 - 9: We cannot support language found at R18-11-605(B)(3) which states "The Department may consider a single line of water quality evidence when the evidence is sufficient to demonstrate that the surface water or segment is impaired or not attaining." Without a formal QAP guidance document and a DAC guidance document which includes exact criteria by which ADEQ measures whether there is sufficient evidence, ADEQ staff will have no formal written criteria from which to judge impairment, and will be forced into making site by site judgement calls concerning the health of the water in question. This rule should specify that ADEQ must develop formal QAP and DAC documents which clearly identifies when sufficient evidence has been collected, before this rule provision can be used by the Department as part of an impaired water identification assessment.

Comment 8 - 20: Subsection (B)(3). The incorporation of the "single line of evidence" approach should be removed from the proposed rules. This is counterintuitive to the concept behind the weight-of-evidence approach that evaluates all data available. Listing decisions should not be made solely on one line of evidence when multiple sources of data exist.

Response: The Department disagrees that the single line of evidence is counterintuitive or controverting to the concept of "weight-of-evidence." The subsection does not specify "shall list" it says "may list" and it is housed within the weight-of-evidence requirements so that if multiple lines of evidence are available, they are considered. However, if one line of evidence, meets the criteria for credible data, and provides clear and convincing evidence of impairment, it can result in a waterbody being listed as impaired. See responses to comments 1 - 6a and 7 - 11 above.

Comment 1 - 7: The provision in R18-11-605 that standards exceedances need to be persistent, recurring, or seasonal in order to list a waterbody is not supported with a technical or legal rationale, and appears to be inconsistent with federal listing requirements and applicable Arizona water quality standards. We are aware of no provision in state standards that limits applicability of standards to these circumstances or requires their showing in order to find a water body out of compliance. We also remain concerned by the implication in the weight-of-evidence section that waters that are shown to exceed one element of standards (e.g., numeric criteria) might not be listed unless there are other lines of evidence confirming the apparent impairment. Please refer to the more detailed discussion of these concerns in our October 4, 2001 letter.

Response: The Department disagrees. In considering whether data indicate that the impairment is due to persistent, recurring, or seasonal conditions is technically sound because it ensures that waters will not be listed because of isolated or temporary incidents that are not conducive to the development and implementation of a TMDL. The resources needed to develop a TMDL should only be expended on water quality problems that are recurring, seasonal, or persistent in nature and on surface waters that are truly impaired. Single event exceedances, such as spills, can be addressed through permitting and/or compliance and enforcement programs. The Department believes that the commenter misunderstood the weight-of-evidence approach. The rule allows for listing of waters if a single line of evidence clearly shows impairment. The commenter suggests that a surface water exceeding the numeric criteria "might not be listed unless there are other lines of evidence confirming impairment." This is an incorrect interpretation. No change has been made to the rule.

Comment 7 - 31a: Persistent, Recurring, or Seasonal Exceedances: EPA argues that the provision in R18-11-605(B)(1)(b), which requires consideration of whether the data indicates that an impairment is due to persistent, seasonal, or recurrent conditions prior to listing, appears to be inconsistent with federal listing requirements and applicable Arizona water quality standards. EPA gives no citation to the federal listing requirements to which this language is alleged to be inconsistent and we are aware of no such inconsistency.

With respect to the allegation that the language is inconsistent with Arizona's water quality standards, it is important to remember that the proposed rule is for determining whether waters will be placed on the state's 303(d) List or on the Planning List for further review. The proposed rule is not intended to change any of the state's water quality standards. In fact, under recent revisions to EPA's water quality standards rules (see 40 C.F.R. 131.21(c)), changes to a state's surface water quality standards are not effective for Clean Water Act purposes until the revisions have been reviewed and approved by the appropriate EPA Region. Consequently, because the proposed impaired water identification rule is not subject to EPA's review and approval, the provisions in the rule will not be used to enforce water

quality standards in permitting or other related contexts, rather the provisions will only be limited to defining when ADEQ will determine whether waters should be listed as impaired for TMDL development purposes.

Moreover, considering whether data indicates whether the impairment is due to persistent, recurring, or seasonal conditions is technically sound because it ensures that waters will not be listed because of isolated or temporary incidents that are not conducive to the development and implementation of a TMDL. In addition, listing of waters that are not impaired because of persistent, recurring, or seasonal conditions will result in wasting valuable TMDL resources that would be better used by focusing such resources on waters that are truly impaired.

Response: The Department appreciates the comment.

Comment 1 - 10: The revised rule provides no specific direction concerning the collection and analysis of non-traditional data and information sources (e.g. sediment, tissue, physical, and biological data and information). These data and information sources must be considered in the listing process if they are existing and readily available (see 40 CFR 130.7(b)). The preamble appears to acknowledge that these types of information may be more discriminating than traditional water column data in some circumstances, but the rule does not explain how these data and information sources will be considered.

Response: See response to 1 - 7a under R18-11-605 under Narrative Standards.

Comment 8 - 18: Subsection (B)(2)(c). As stated above, airborne deposition is not evaluated, we believe it should be included as well.

Response: See response to comment 8 - 17 in R18-11-604.

Comment 8 - 19: Subsection (B)(2)(d). As stated previously, we do not believe MS4 NPDES/AZPDES data should be used for listing decisions.

Response: See response to comment 8 - 14 in R18-11-604.

Binomial Approach

Comment 7 - 6: We support adoption for the binomial approach reflected in proposed R18-11-605. The binomial approach is cited with approval in the NRC Report (p. 57). It also has been adopted as part of Florida's TMDL rule and approved by EPA in that context. See F.A.C. §§ 62-303.320(1) and 62-303.420(2). A binomial approach also is used in Texas (Attachment 7, at 6-10) and Nebraska (Attachment 5, at 12-14).

The same 20 sample minimum proposed by ADEQ for inclusion on the 303(d) List was adopted in Florida and approved by that EPA Region. See F.A.C. § 62-303.420(2). Similar, albeit somewhat smaller, minimum sample sizes (10) are used by Colorado, Nebraska and Texas (Attachments 4, 5 and 7, respectively). In the 1998 ANPRM, EPA reaffirmed the need for adequate data in making water quality assessments:

EPA believes that placement of waters on section 303(d) and section 305(b) lists should be based on broad thorough assessment data, not on limited and narrow data. The former will help ensure that targeted water quality controls and management actions are appropriate and will result in water quality standards attainment; the latter can result in significant outlays of state and Tribal resources targeted on waters where water quality problems are not well understood.

63 Fed. Reg. at 36797.

ADEQ's default minimum sample requirements are reasonable and should remain in the final rule. As noted below, however, we are concerned with the exceptions to those requirements that would allow listing based on as few as two samples (see Comment 7-13).

Response: The Department appreciates the comment.

Comment 1 - 3: The revised rule raises the minimum sample size for conducting 303(d) listing assessments to 20 samples. This approach appears to be inconsistent with the recommendations of the Florida researchers whose report is cited in the preamble as providing the technical basis for Arizona's binomial approach. The Florida report recommends a minimum sample size of 10 (Lin, et al., October 2000, p. 15). The preamble also cites Smith, et al., 2001; however, the authors of this study conclude only that below sample sizes of about 20, neither the binomial or more traditional "raw score" approaches fully address decision error rates (Smith, et al., p. 612). In any event, the proposed Arizona rule provides no specific analytical rationale for its choice of minimum sample size. In its listing submission, ADEQ will need to provide a more detailed rationale for its binomial approach, including its reliance on a minimum sample size of 20 samples. Moreover, ADEQ will need to describe its basis for not listing waters on the 303(d) List

with evidence of pollutant impairment based on less than 20 samples. Please see our more detailed comments on this issue in our October 4, 2001 letter.

Response: The Department will provide a technical support document with the 2002 303(d) List that explains the rationale for its binomial approach. The commenter is correct that the Florida support study recommends a minimum sample size of 10, however, the final Florida rule requires a minimum sample size of 20 for its "verified" or 303(d) List. Note that EPA's draft CALM guidance provides that "[s]ample size is an important element of data quality. In general statistical tests have a high level confidence with 30 or more samples."

There are several opportunities within the rule that allow the Department to make an impairment decision based on fewer than 20 samples. Subsection (D)(2) provides that when there are less than the required number of samples or sampling events, the Department may list if more than one temporally independent sample exceeds an acute criterion in a three-year period or exceeds the standards for nitrate/nitrite or bacteria. The Department provided this exception to the binomial approach for smaller data sets because of the higher probability of errors in data sets of less than 10 points. The Department believes that through its weight-of-evidence approach in subsection (B), it will be able to list a surface water or segment with fewer than 20 samples if the body of evidence were to indicates impairment. No change has been made to the rule.

Comment 1 - 3a (October 4, 2001 comment letter): The binomial approach described in subsection (C)(3) for assessing sample sizes of ten or greater has several problems. The approach is heavily biased toward minimization of type 1 error (listing waters which are not, in fact, impaired) at the cost of ensuring very high type 2 error (not listing waters which are, in fact, impaired). The preamble (p. 7) properly recognizes the prospective environmental and human health costs of type 2 error, but essentially discounts these prospective costs. Instead, the preamble appears to imply that reduction of public resource expenditures is more important than avoidance of likely environmental and human health costs. We disagree that this is a reasonable weighing of costs associated with inaccurate assessment decisions. The Department should provide a more detailed and persuasive rationale for this approach to error management in the assessment process.

The proposed binomial approach is based on an incorrect reading of EPA guidance concerning allowable water quality standards exceedance rates. The assertion that EPA endorses use of a 10% standards exceedance rate is incorrect. EPA guidance has suggested the use of a 10% sample exceedance rate only to assess sample sets to characterize the underlying water quality conditions with respect to conventional pollutants. The use of this exceedance rate in a binomial assessment method has not been shown to be protective of water quality nor consistent with water quality standards requirements. It is likely that use of this exceedance rate will increase the number of waterbodies that do not meet water quality standards which are missed in the listing decision.

Finally, the relationship between the assessment procedures in subsections (C) and (D) is unclear. We understand from discussions with Department managers that the Department intends that waters will be listed if there are a certain minimum number of exceedances for certain standards regardless of sample size, and we strongly support this goal. However, subsection (D) states that "[n]otwithstanding (the prior sections) and when there are less than ten samples" evidence of impairment exists based on the existence of fewer exceedances. This language appears to limit the applicability of subsection (D) to instances when there are less than ten samples. As a result, it appears that the approach used to assess waters with more than ten samples appears to be substantially less protective than the approach used to assess waters with less than ten samples. For example, a single exceedance of an acute standard would be sufficient to trigger a listing if the sample size were nine; however, three exceedances would be needed for the same standard if the sample size were ten. Moreover, the technical basis for the cutoff levels established in subsection (D) is unclear, and is substantially more stringent than the methodology used for Arizona's 1998 listing decisions.

We recommend that the Department clarify the relationship between the assessment methods described in subsections (C) and (D). The Department should explain that for any toxic pollutant or pollutant for which Arizona water quality standards are expressed as a single sample maximum, the provisions of subsection (D) apply regardless of sample size. Finally, the Department should explain a clearer technical basis for the rather stringent cutoff levels proposed in subsection (D).

We generally support the use of appropriate statistical tools, including the binomial approach, for water quality data analysis. Department analysts have significant discretion in designing a binomial assessment methodology; however, we recommend the following approaches to address their concerns about the Department's proposed approach to binomial analysis for listing purposes:

Specification of Type 1 and Type 2 Error. The rules provides an inadequate rationale for the Department's design of the binomial assessment approach. The technical paper referred to in the preamble is only one of several references concerning the use of this statistical procedure, was not published nor peer reviewed, and was prepared directly to support Florida's preferred listing methodology. As such, it provides an insufficient analytical basis for the Department's rule proposal. Moreover, the Department does not follow several key recommendations in that paper, including the recommendation that a separate binomial approach be applied for delisting decisions to test the alternative null hypothesis that waters are impaired. In particular, the referenced paper provides no rationale supporting the

Department's proposed 10% exceedance rates or preference for minimizing type 1 error at the cost of increasing type 2 error.

We believe that it is most consistent with sound science and statistical practice to balance type 1 and type 2 error. There is no statutory or regulatory basis for systematically favoring reduction of type 1 error in 303(d) listing at the cost of greatly elevating type 2 error. We recommend that the Department consult the analysis and supporting table in Smith, et al, 2001 (p. 611) which illustrates suggested cutoff levels that balance error for different sample sizes. As discussed in the draft Consolidated Assessment and Listing Methodology (CALM) guidance, we recommend balancing type 1 and type 2 error rates at the 15% level. In general, we support setting a somewhat lower type 1 confidence rate to help balance type 2 error. The Department should strive to increase sample sizes as the best approach to managing type 2 error.

In cases where a waterbody was previously identified as impaired or threatened (e.g., through a prior 303(d) List, 305(b) Report, or other water quality assessment result), the Department should account for this prior information in the design of the binomial approach. Methods which facilitate consideration of this prior information include:

- Establishing a separate binomial cutoff regime which tests this alternative null hypothesis to consider delisting previously listed waters (see Florida approach as an example),
- Using Bayesian statistical approaches which explicitly account for prior information about waterbody status (see Smith, et al, 2001) for an introduction to this approach.
- Balancing type 1 and type 2 error rates, which reduces the difference in assessment results depending upon the selection of null hypothesis.

Water Quality Standards Exceedance Rates. The Department should provide a specific rationale supporting the selected exceedance rate or rates, supported by references to state water quality standards, water quality standards implementation procedures, EPA criteria or guidance documents, academic studies, or other information sources to provide support for the rationales. The 305(b) guidance and other EPA guidance should not be cited as authority in support of selection of a 10% exceedance rate as the binomial test exceedance rate. The preamble mischaracterizes EPA guidance in this regard. EPA guidance refers to the 10% exceedance rate as a method for assessing data sample sets--not as an acceptable exceedance rate in the "population." Moreover, EPA guidance refers to a 10% exceedance rate only for conventional pollutants--not toxic pollutants. Section 305(b) and CALM guidance are intended to provide guidance concerning the assessment of limited sample sets for purposes of making assessment determinations—they are not intended to provide EPA's interpretation of the actual acceptable rate of WQS exceedances in receiving waters. As previously suggested, it would be more consistent with EPA's recommended criteria development approaches to assess a 95% compliance rate for conventional pollutants, and a more stringent compliance rate for toxic pollutants, in the context of a binomial assessment method.

The CALM guidance and previous 305(b) guidance suggested an impairment finding in cases where 10% of data points exceed the standards for conventional pollutants, in part to reflect the expected recovery time associated with aquatic exposures to conventional pollutants as well as the expected sampling error issues and prospects for type 1 error. Because the binomial approach already accounts for and directly manages uncertainty associated with assessments based on small sample sizes, including type 1 error in particular, it would be inappropriate to apply the 10% exceedance rate directly within the context of a binomial assessment approach. To use a 10% test in a binomial assessment context would, in essence, result in "double counting" of allowances intended to limit type 1 error.

Assumptions Concerning the Data Sets To Be Analyzed. When applying a binomial statistical approach, the Department should analyze data sets to ensure that key assumptions concerning the dataset are met with respect to the shape and normality of the distribution, the representativeness of the dataset of underlying water quality, and the presence of bias, serial correlation, or autocorrelation in the data sets. We expect that the Department will document its analysis which shows these assumptions are met to a reasonable degree. Not all data sets must meet every assumption completely, but the Department should discuss potential errors associated with application of binomial analysis methods to data sets that do not meet one or more key assumptions. We want to stress that the data should be assessed through another assessment method if the assumptions necessary to carry out a binomial assessment are not met.

Response: The Department will provide a technical support document with the 2002 303(d) List that explains its methodology for the assessment of surface waters and the identification of impaired waters. This companion document to the final 303(d) List will provide:

- An overview of both processes;
- The Department's efforts to develop a comprehensive assessment and listing document;
- The general assessment methodology, including data sources, data submittals, data quality objectives, and data considerations;
- Methodology for assessment use support, including core parameters for each designated use, and aesthetics;
- Methodology for determining impairment, including discussion of the binomial method and underlying assumptions;
- Prioritization of impaired waters, including ranking values and TMDL development schedule;

- Public participation in the processes; and
- Dispute resolution.

The commenter is correct that the Florida technical support study recommends a minimum sample size of 10, however, the final Florida rule requires a minimum sample size of 20 for its "verified" or 303(d) List. Note that EPA's draft CALM guidance provides that "[s]ample size is an important element of data quality. In general statistical tests have a high level confidence with 30 or more samples."

There are several opportunities within the rule that allow the Department to make an impairment decision based on fewer than 20 samples. Subsection (D)(2) provides that when there are less than the required number of samples or sampling events, the Department may list if more than one temporally independent sample exceeds an acute criterion in a three-year period or exceeds the standards for nitrate/nitrite or bacteria. The Department provided this exception to the binomial approach for smaller data sets because of the higher probability of errors in data sets of less than 10 points. The Department believes that through its weight-of-evidence approach in subsection (B), it will be able to list a surface water or segment with fewer than 20 samples if the body of evidence indicates impairment. No change has been made to the rule.

Comment 1 - 6: Neither the preamble nor the rule provide a careful description of the statistical basis for the specific choices made by Arizona with respect to the design characteristics of its binomial 303(d) listing and monitoring list approaches. We urge ADEQ to develop a technical support document or more detailed rule preamble that fully describes the analytical basis for its approach to numeric standards assessments. Such a description will be required as a part of the 303(d) List assessment pursuant to the provisions of 40 CFR 130.7(b).

In the revised preamble, ADEQ acknowledges that its binomial assessment approach is based on an approach to managing type I and type II error that is different than recommended in EPA's draft CALM guidance (2001). However, the preamble does not describe why the Arizona approach is reasonable or consistent with sound statistical practice. In addition, EPA remains concerned about the application of a 10% exceedance rate as the basis for binomial tests. We reviewed the EPA guidance cited in the preamble as recommending listing of waters where conventional pollutants exceed standards in more than 10% of samples. That document provides guidance on methods for deriving aquatic life criteria and is not a water quality assessment guidance document. We do not believe the document makes the recommendation suggested in the preamble. EPA's most recent section 305(b) assessment guidance generally recommends finding that waters which exceed conventional standards more than 10% of the time be considered partially supporting of the aquatic life use (EPA, 1997). However, as discussed in more detail in our October 4, 2001 guidance, this is not the same as applying a 10% exceedance rate through a binomial test. The practical effect of applying a 10% exceedance rate through a binomial test is that far more than 10% of the samples need to exceed the standard in order to consider the water body impaired. For example, for a sample size of 20, 25% of samples would have to exceed standards in order to determine that the water body is impaired. This result appears to be inconsistent with EPA's 1997 guidance. Please see our October 4, 2001 comments for more detailed discussions of these concerns.

Response: The Department doesn't believe a detailed technical explanation of the binomial methodology or the assessment process belongs in either the rule or the preamble. As noted in the response to comment 1 -3a, a separate technical support document is being prepared for use by EPA and the public when viewing the 2002 303(d) List. No change has been made to the rule.

Comment 1 - 8a: We understand that ADEQ also adopted the monitoring list approach and modified the binomial approach minimum sample thresholds in part to more closely emulate the listing approach adopted by Florida. ADEQ staff have indicated that it believes its revised assessment approach should be acceptable because EPA generally endorsed the Florida listing methodology. Although EPA Region 4 indicated that the Florida listing methodology is generally consistent with federal listing requirements, Arizona's methodology is substantially different from Florida's methodology. EPA Region 4 reviewed the Florida methodology as an entire package, taking into account the technical aspects of the listing methodology, the state's existing monitoring program, and the state's commitment to future monitoring. Florida went to great lengths to document the analytical and statistical basis for its listing methodology by contracting with statisticians to assist in developing and documenting the statistical methods used. EPA found that Florida had made an extremely strong commitment to monitoring the waters on the new monitoring list in the near future and to use preexisting STORET data in its assessment process. Florida's procedure also provides for listing of toxic pollutants due to exceedances of acute standards if there is more than one exceedance in any three year period. Moreover, Florida's delisting procedure helps ensure that previously listed waters will not be removed from the 303(d) List simply because the minimum data requirements were not met.

Response: As stated in the Preamble, one of the reasons the Department terminated the previous rulemaking was to incorporate key concepts from EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*. In this guidance, EPA encourages states to develop an integrated report that will provide a clear summary of the water quality status of the state's waters and the management actions necessary to protect and restore them. Florida is one of several states that decided to prepare a "monitoring," "preliminary," or "planning" list of waters that for a variety

of reasons cannot be fully assessed. In Arizona's listing process, the Planning List will contain a range of waters, as noted in R18-11-604(D)(2), including those where there is insufficient data to assess; where a TMDL has been developed and the effectiveness monitoring has yet to commence; and waters that are impaired due to pollution rather than pollutants, etc.

To address the waters on this new Planning List, the Department made a strong commitment to monitoring by creating a new Targeted Monitoring Team. This new team will be separate from the ambient monitoring efforts and will be focused on prioritizing waters on the Planning List for sampling and carrying out the investigations. As time permits, this team may assist in pre-TMDL sampling and conduct post-TMDL effectiveness sampling. In addition to the new targeted team, the Department will be re-focusing ambient monitoring efforts for the next few years to also support data collection for surface waters on the Planning List.

While state law prohibits listing waters from previous 303(d) Lists that do not meet the credible data requirements of R18-11-602, the rule states that those previously listed waters shall be placed on the Planning List for further data collection to allow verification of the surface water's status. The Department has committed to addressing those previously waters within two watershed management cycles.

Comment 1-8b: Arizona's proposed listing approach differs from Florida's in important ways. Florida decided to accept existing STORET data as valid for the 2002 listing cycle because it relies on STORET for most of its assessment data and because the state did not want to unreasonably exclude existing data from consideration. Arizona's proposed listing rule is not clear about whether and how STORET data would be considered, but appears to presume the data must meet the data quality and data representativeness criteria in R18-11-602. Although the Arizona rule provides the flexibility to accept data that does not meet every quality assurance and representativeness test, there is no assurance that existing STORET data will be accepted and used for the 2002 listing assessment.

Response: The Preamble states that the Department begins the 303(d) listing process by assembling all existing and readily available surface water quality data and information from numerous sources, such as federal and state agencies (including EPA's STORET database). The Department considers STORET data valid provided it meets the data quality requirements of R18-11-602. STORET is only one of many data sources that the Department uses in its assessment and listing process. No change has been made to the rule.

Comment 1-8e: We note these details about the Florida approach in comparison to the Arizona approach to illustrate that each state listing approach has unique characteristics and that the two approaches are not identical. EPA is obliged to consider each element of a state's listing methodology within the unique context of that state's overall water quality assessment approach. Arizona's approach is more stringent than Florida's in some ways in less stringent than others. Therefore, in its 303(d) listing submission, EPA expects Arizona to describe in detail the analytical basis for its assessment methodology.

Response: The Department agrees that each state's approach to assessment and listing is, and should be, unique to that state. We believe our responses to the various points of the argument show that Arizona's program is protective of its surface water quality and meets the requirements of both federal and state law. The Department will provide a technical support document with the 2002 303(d) List that outlines the assessment and listing process in detail. No change has been made to the rule.

Comment 5 - 9: According to the documentation associated with this rule package, tables 1 and 2 in this section are based on work done by the state of Florida. Considering the Florida law and rules are the subject of litigation, is this appropriate? Shouldn't the ADEQ develop its own process for establishing these tables?

Response: The Department understands that the subject of the Florida appeal is not the binomial distribution method per se, but rather that state's rulemaking package in total. Several other states, including Texas and Nebraska, have recently applied the binomial method—one of several nonparametric statistical approaches to hypothesis testing, to their listing process. Tables 1 and 2 present, in tabular form, the minimum numbers of exceedances, given a certain sample size, that will place a waterbody on either the Planning List or the 303(d) List. Which list the waterbody is placed on is a function of the confidence level used in the equation. These tables can be generated using many statistical packages, including Microsoft Excel and Corel Quattro Pro and inserting the number of trials (sample size), the probability (accepted exceedance rate), and alpha (the confidence interval). The technical support document that will accompany the final 303(d) List will provide a more detailed explanation of the statistical methodology behind the tables.

Comment 5 - 11: It is clear that subsection (D) unduly limits the data that can be considered by the ADEQ for listing and clean up of a polluted stream or stream segment in several ways. First of all, there must be at least 20 samples for each pollutant and for segment and at least 10% of the samples must exceed water quality criteria and then an additional 90% confidence level is additionally required in order for the water to be further considered for impairment (in other words with 20 samples you would have to have 5 exceedances), plus the data samples must be taken at least one

week apart and from three different sampling events. These requirements alone will result in the delisting of streams and streams segments. Per 40 CFR 130.7(b)(6)(iv), states and in this case the ADEQ is supposed to show could cause for delisting water bodies. The fact that the agency has significantly increased the sampling requirement and has not met those new sampling requirements is not good cause in our opinion.

Response: The Department disagrees with the commenter's interpretation of subsection (D). Under subsection (D), the Department "shall consider at least 20 spatially or temporally independent samples collected over three or more temporally independent sampling events." Table 2 presents the minimum number of exceedances found in a specified number of samples that will result in a determination of impairment. Table 2 is based on two factors: a 10 percent exceedance probability and a 90 percent confidence level. The 10 percent exceedance means that a water body will be listed as impaired whenever the true exceedance probability of a pollutant is greater than 0.1. The 90 percent confidence level is a probability that the true exceedance rate falls within the interval given.

The commenter incorrectly interprets the spatial and temporal sampling definitions. A sampling location, such as the Department's Fixed Station Network sites, can be sampled numerous times, but the samples must be separated by at least one week. Alternately, several samples can be taken along the same stream course, but to be considered 'independent,' they must be taken more than 200 meters from one another unless there is an intervening influence that needs to be characterized by taking samples at closer spaced intervals. The Department believes that this rulemaking will result in changes to the monitoring program, but will also provide the sound science to ensure samples are spatially and temporally representative of the watercourse as well as the conditions.

Planning List

Comment 8 - 21: Subsections (C)(2) and (D)(2). In both of these sections, (planning list and 303(d) List), spatially independent samples do not appear to matter. We disagree with the exclusion of spatially independent samples. Listing decisions need to have spatially independent samples, temporally independent samples and multiple samples. Also, as stated previously, our belief is that if these conditions are not met, the data *should not be used or more data should be obtained* to make a listing decision.

Response: Thank you for pointing out the omission, The concept of spatial and temporal samples was in previous drafts but was left off this final rule in error. In addition, an error was discovered in the definition of "spatially independent samples" in R18-11-101(17). The definition of "spatially independent samples" and subsections (C)(1)(a) and (D)(1)(a) have been revised as follows:

> *"Spatially independent samples" means samples that are collected at distinct stations or locations. The independence of the sample is based on whether the samples are collected more than 200 meters apart or, if ~~are~~ collected less than 200 meters apart, were collected to characterize the effect of an intervening tributary, outfall or other pollution source, or significant hydrographic or hydrologic change."*
>
> *(C)(1)(a): Consider at least ten spatially or temporally independent samples collected over three or more temporally independent sampling events;*
>
> *(D)(1)(a): Consider at least 20 spatially or temporally independent samples collected over three or more temporally independent sampling events;*

The commenter is correct that if requirements for spatial and temporal independence are not met, the evaluation cannot be made and additional sampling will be conducted. Basically, evaluation for placement on the Planning List requires a minimum of 10 samples obtained over three or more sampling events and for placement on the 303(d) List, a minimum of 20 samples obtained over three or more sampling events. An important concept in both assessment and listing is the need for samples to have degrees of spatial and temporal independence, both of which are defined in this rulemaking. As a general rule, if the same site will be sampled numerous times, then the sample events must be at least one week apart. If numerous sites will be sampled along a stream on the same day or multiple days, those sites must be separated by a minimum distance of 200 meters unless closer spacing is necessary to capture a possible source or influence. Both subsections (C)(1)(a) and (D)(1)(a) have provisions for placement on the appropriate list, with fewer than the required number of samples for certain parameters that have acute toxic impacts or short-term human or aquatic health exposure concerns.

Comment 5 - 10: Under subsection (C), the rule sets up a "Planning List" for streams that demonstrate some evidence of impairment, but that do not have the required data. According to this, it will be difficult to place a stream or stream segment on the planning list. There are approximately 49 stream segments currently on the 303(d) List that will be dropped from the list because the agency does not have the ten or more samples now needed to even get on the planning list. Not only does this rule make it much more difficult to list and therefore require clean up of streams that are truly impaired, but it even makes it difficult to place them on the planning list so the required data might one day be acquired. We are also concerned that this "Planning List" will be a type of purgatory for our streams and rivers. We would like to see a time limit on how long the water can remain on this list with the default to be listing of the water if the agency does not obtain the required samples. This will compel the Department and the polluters to help gather the needed data to determine the impairment status.

Response: The commenter is correct that subsection (C)(1) addresses the use of the binomial method to determine impairment based on the number of exceedances. But subsection (C)(2) presents criteria by which a water can be placed on the Planning List with fewer than 10 samples if there are sufficient exceedances of particular surface water quality standards – primarily those dealing with acute toxicity to humans, aquatic life, or wildlife, and public health. In addition, R18-11-604(D)(2) enumerates a number of factors that may result in a water being placed on the Planning List without the requisite 10 sample minimum, including a TMDL that has been completed and the effectiveness monitoring has not yet or has just recently begun; the data that placed the water on the 1998 303(d) List doesn't meet the credible data criteria; there is some evidence of impairment, but an insufficient number of samples, for example, < 10 samples; trend analysis indicates that water quality may be degrading; or remedial actions with adequate documentation to provide reasonable assurance are ongoing and will result in standards being met before the next listing cycle. The Department believes the rule offers the necessary latitude to place waters on the Planning List for further monitoring.

As for the length of time a surface water can be on the Planning List, as noted in previous comments, the Department has committed to creating a separate targeted monitoring team whose primary focus will be monitoring waters on the Planning List. As there are a number of previously listed waters moving to the Planning List as a result of the credible data requirements, the targeted team will be prioritizing the list of waters to address those with the most serious issues first. It is the Department's goal that all waters on the new Planning List (that previously appeared on the 1998 303(d) List), will be monitored and assessed during the first or second rotation of the state's watershed management process. In addition to the new targeted team, the Department is focusing the efforts of the ambient monitoring teams on Planning List waters in each of the two watersheds that are monitored each year as part of the watershed rotation. High priority water/pollutant combinations will be monitored and assessed during the first rotation, within five years of 2002, and low priority water/pollutant combinations will be monitored and assessed during the second rotation through the watershed cycle, within 10 years of 2002.

Comment 1 - 4: We understand that ADEQ has proposed the monitoring list approach to help ensure that potentially impaired waters are targeted for monitoring. We support the inclusion of a monitoring list in the proposal but do not believe its inclusion fully compensates for several 303(d) listing provisions that appear to be inconsistent with federal listing requirements.

Comment 1 - 12: Current federal regulations require listing of waters that will not attain water quality standards in the near future. This interpretation is consistent with national listing guidance, including the recent "2002 Integrated Water Quality Monitoring and Assessment Report Guidance" (November 19, 2001). The proposed rule should be revised to provide for the listing of threatened waters.

Response: The Department disagrees that the rule is inconsistent with federal regulations. The Department believes both comments are referring to "threatened waters" or those waters that are currently meeting standards, but are not expected to meet standards in the future. Both federal law and regulations are somewhat ambiguous with regards to threatened waters. Federal rules require that states assemble and evaluate all existing and readily available data, including "waters for which dilution calculations or predictive models indicate nonattainment of applicable water quality standards (40 CFR 130.7((b)(5)(ii))," but section 303(d) of the Clean Water Act is silent on threatened waters. The *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* suggests that current rules require the Department to include threatened waters on the 303(d) List, but as noted above, there is no clear statutory or regulatory authority. The final July, 2000 TMDL rule (now suspended) did not require states to list threatened waters. Given this understandable uncertainty regarding the ultimate fate of threatened waters, the rule provides for placing threatened waters on either the Planning List (R18-11-604(D)(2)(i)) or the 303(d) List (R18-11-604(E)(1)(b)), depending on whether, at the time the Department submits its final list to EPA, federal rules required threatened waters to be listed.

303(d) List

Comment 5 - 12: We are especially concerned about how this section of the rule affects ephemeral waters. It is extremely unlikely that any ephemeral waters will be listed on either the Planning List or the 303(d) list -- even if it is in reality impaired -- because the sampling requirements will not be met. It will be difficult to replicate exactly the data and it will be virtually impossible to get 10 let alone 20 samples from many of these waters. How will the Department ensure that these waters are cleaned up if there is no program in place to do so and they are not addressed via development of TMDLs?

Response: The Department disagrees. It will take time to gather the necessary number of samples to verify that a surface water is truly impaired, but the Department believes that this rulemaking sets the stage for a multi-faceted monitoring program that can provide the necessary data. This will mean that the Department has to make modifications to its program, including adding additional staff, making use of available sampling technologies, such as automated sampling equipment and weather stations; using monitoring partners, such as other state, federal, local agencies, volunteer networks, and watershed organizations; and developing new assessment tools to determine the health of the waterbodies, for example, physical integrity standards, bioassessments, and probability monitoring. The Department believes that proper project management can yield valuable information about a surface water with a modest number

of sampling events. Key factors (within the Department's control) are sufficient staffing levels for the event, intelligent deployment of equipment, and an ample sampling budget. What is obviously not within the Department's control is the weather. One of the goals of the targeted team is to obtain sufficient data on surface waters so that if they are listed, the TMDL unit has sufficient baseline data to begin their analysis, such as initial source identification, hydrologic extremes, geology, weather information, and background sampling.

Provision to List with Fewer than 20 Samples

Comment 1 - 5: We are very concerned about the deletion of the provision in the previous draft rule that would enable listing of toxic pollutants based on a limited number of exceedances, regardless of sample size. The revised rule now makes this provision a basis for water body inclusion only on the monitoring list. Instead, waters would have to meet the binomial listing test in order to be listed for toxic pollutants, a provision that is inconsistent with EPA national guidance. EPA did not approve of Florida's similar proposed approach of applying a 10% exceedance frequency in evaluating toxic pollutant exceedances (EPA letter to Jerry Brooks, April 27, 2001, p. 4). Therefore, we are concerned that this provision appears to be inconsistent with federal listing requirements and applicable Arizona water quality standards.

Comment 1 - 8d: Arizona's listing methodology has no provision for Section 303(d) listing toxic pollutants due to exceedances of acute standards except through the binomial assessment approach. Florida's methodology provides for 303(d) listings if acute toxic pollutant standards are exceeded more than once in 3 years (see attachment to letter from EPA to Jerry Brooks, April 27, 2001, p. 4).

Response: The Department disagrees. Subsection (D)(2)(a) allows for the listing of a surface water or segment based on fewer than 20 samples and three sampling events if there is more than one exceedance in any three-year period of a surface water quality standard for toxics, nitrate/nitrite, or bacteria. Subsection (D)(2)(b) also provides for listing if there is more than one exceedance of a surface water quality standard based on an annual mean, 90th percentile, chronic criterion or geometric mean. Each of the standards noted in subsection (D)(2)(b) are defined in R18-11-101 and require a specific number of samples before evaluation can begin. For example, the 90th percentile standard requires, by definition at R18-11-101(32), "a minimum of 10 samples each taken at least 10 days apart." If there is more than one exceedance of the 90th percentile standard, there has to have been a minimum of 20 samples taken, each taken a minimum of 10 days apart from one another, which equates to over a 200 day time span. This clearly provides for collection of an adequate number of samples over a range of conditions and seasons.

Comment 7 - 13: Subsection (D)(2)(a). We still have significant concerns with the provisions in proposed R18-11-605(D)(2)(a) whereby waters may be listed based on fewer than 20 samples (in some cases, as few as 2 samples would be sufficient). The basis for the requirement that there be 20 samples and 5 exceedances before a water can be listed is to ensure that enough information is gathered to adequately characterize a water before it is placed on the TMDL list, with all the consequences attendant to such listing (expenditure of resources by ADEQ and by impacted stakeholders, possible limits on new or modified discharge permits in the water, etc.). Using a binomial approach and requiring at least 20 samples ensures that there is a 90% confidence that the water is actually impaired. See 8 A.A.R. 540. A smaller data set than 20 samples increases the likelihood that waters will be listed inappropriately, since such a small data set is more likely to be reflect transient conditions or to be influenced by errors in sampling or analysis (which can never be completely eliminated, though the proposed QA/QC requirements will help in this regard).

The preamble (8 A.A.R. 540) indicates that these exceptions are based on EPA guidance, but does not specify that guidance. We note that the state on which this approach is based, Florida, does not allow the exception proposed by Arizona to minimum sampling requirements, and that Florida's approach was approved by EPA. See F.A.C. § 62-303.420(2). In Florida (as well as in other states with minimum sampling requirements, such as Texas[33] and Nebraska[34]), waters where fewer than the minimum number of samples have been collected generally are placed on those states' equivalents of the Planning List for future study, not listed as impaired based on a few samples.

A.R.S. § 49-232(B)(3) requires an adequate number of samples to be collected, taking into account the nature of the water and the parameter being analyzed. We do not believe this provision allows for fewer samples based on the type of criteria in question (acute vs. chronic).

For all these reasons, proposed R18-11-605(D)(2)(a) should be deleted.

Response: In accordance with the Clean Water Act, states are required to adopt water quality standards to protect public health or welfare, enhance the quality of water, and "serve the purposes" of the Clean Water Act. According to sections 101(a), 101(a)(2) and 303(c) of the Clean Water Act, 'serve the purposes of the Act' means the state's water quality standards program should (1) include provisions for restoring and maintaining chemical, physical, and biological integrity of state waters; (2) provide, wherever attainable, water quality for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water ("fishable/swimmable"); and (3) consider the use and value of state waters for public water supplies, propagation of fish and wildlife, recreation, agriculture and industrial purposes, and navigation (Technical Support Document (TSD) for Water Quality-based Toxics Control, EPA/505/2-90-001, March, 1991.) 40 CFR 131.11 encourages states to adopt both numeric and narrative criteria. Aquatic life criteria must protect against both short-term (acute) and long-term (chronic) effects. Numeric criteria particularly are

important where the cause of impairment is toxicity, or for protection against pollutants (including toxicity) with potential human health impacts or bioaccumulation potential (TSD, 1991).

Aquatic and Wildlife protection: To predict or ascertain the attainment of criteria it is necessary to specify the allowable frequency for exceeding the criteria. EPA recommends a once in three-year average frequency for excursions of both acute and chronic aquatic life criteria. These recommendations apply to both chemical-specific and whole effluent approaches (*Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses*, EPA, 1985). EPA selected the three-year return interval with the intent of providing a degree of protection roughly equivalent to a 7Q10 design flow (e.g., low flow) condition and with some consideration of rates of ecological recovery from a variety of severe stresses. EPA concluded that a single marginal criteria excursion, for example, a slight excursion over a one-hour period for acute standards or over a four-day period for chronic, will result in little or no ecological effect and require little to no time for recovery (TSD, 1991).

Human health protection:There are a number of key elements to state water quality standards and the implementation procedures relevant to human health protection. States must determine ambient standards for the two primary human exposure routes: fish consumption and drinking water. Water quality criteria for human health contain only a single expression of allowable magnitude that protects against the long-term (chronic) human health effects. However, a complete human exposure evaluation for toxics will also examine other exposure routes, including recreational and occupational contact, dietary intake other than fish consumption, inhalation of air, and the effects of certain pollutants on vulnerable populations, such as infants, small children, and the elderly.

Subsection (D)(2)(a) supports the goals of the water quality standards program by allowing the Department to list based on more than one exceedance of three specific types of water quality standards: (1) any acute water quality standard (to protect against short-term toxic effects to aquatic life and wildlife); (2) the domestic water source standard for nitrate/nitrite (human health concern especially for infants and small children); and (3) the single sample maximum standard for bacteria (a recreational water quality standard to protect human health). Each of these standards are set to protect human health and aquatic life from immediate and potentially severe effects of pollutants. Acute impacts to aquatic life from toxics, such as metals, can result in immediate mortality and/or prolonged impacts to reproduction. Prolonged consumption of water containing elevated levels of nitrates can cause methemoglobinemia (blue-baby syndrome) in infants and small children leading to death from asphyxiation. Water quality standards for bacteria are concentration levels of indicator organisms that should not be exceeded to protect human health for waterborne pathogens. Pathogens are disease-causing organisms that include viruses, parasites, and bacteria that can result in gastrointestinal illnesses ranging from mild to severe discomfort and even death. Florida's final impaired water identification rule provides for this provision with respect to acute toxic pollutants. Florida's failure to provide a similar provision for the chronic standards remains an unresolved issue between the state and EPA (Letter to Jerry Brooks, Asst. Director, Florida Department of Environmental Quality, dated April 27, 2001, on resolution of comments by the USEPA on the Florida draft rules.)

Subsection (D)(2)(b) addresses the chronic impacts of certain pollutants with either toxic or human health concerns and whose standards are expressed statistically based on multiple samples. This is an important concept that each of the three commenters is overlooking. Each of the criteria in subsection (D)(2)(b) have specific numbers of samples required before a set of data can be evaluated for attainment of that standard. For example, the "annual mean" standard is defined in the surface water quality standards at R18-11-101(6) as follows:

> "Annual mean" means the arithmetic mean of monthly value determined over a consecutive 12-month period, provided that monthly values are determined for at least three months. The monthly value is the arithmetic mean of all values determined in a calendar month."

An exceedance of this standard requires a minimum of two samples in each of, at least three months, within a consecutive 12-month period. This requires a minimum of six samples to evaluate the first annual mean. To have "more than one exceedance of an annual mean" would require at least 12 samples taken over two 12-month periods. The second excursion of the standard, based on the number of samples and the time span over which they must be taken, clearly suggests a persistent or recurring water quality issue. Each of the other statistically based standards –> 90th percentile, chronic water quality standard and 30-day geometric mean for bacteria require similar, multiple sampling events to amass the minimum number of samples to perform the necessary statistics. It does not allow for a one time or non-recurring event to serve as justification for listing a stream. No change has been made to the rule.

Comment 4 - 6: Subsection (D). We support the language of the rule which states that "When evaluating a surface water or segment for placement on the 303(d) List, the Department shall: a) Consider at least twenty spatially independent samples collected over three or more temporally independent sampling events." The collection of this amount and temporal range of samples will greatly aid the Department in making an accurate assessment of impairment. We are concerned however with the proposed language at R18-11-605(D)(2) which indicates that the Department may consider listing a surface water without the required number of samples or water quality exceedances mentioned in section R18-11-605(D)(1), if more than one temporally independent sample in any consecutive three year period exceeds certain acute or single sample maximum water quality standards. As stated above, given the potentially large social and economic impact of a listing decision upon Arizona citizens, and the relative ease for ADEQ staff to collect additional current samples and information for an Arizona waterbody, we cannot support this

language that allows a listing consideration with less data. If data is presented to the Department indicating that more than one temporally distinct acute or single sample maximum exceedance has occurred within an Arizona waterbody, then the Department should be obligated to immediately collect additional water quality samples to confirm the information provided. If the Department itself had collected the data, then the Department should have collected the minimum number of samples discussed in section R18-11-605(D)(1). We believe that given the potential impacts of a listing decision, ADEQ should take a very active role in assuring, using field verification, that the information to be used by the Department for a listing decision is current, credible, scientifically defensible, and representative of conditions within the waterbody being assessed. This can occur with the collection of verification samples and information by the Department, not by reducing the amount of information that needs to be collected and assessed.

Comment 9 - 8: Subsection (D)(2). We support the following rule language: "When evaluating a surface water or segment for placement on the 303(d) List, the Department shall: (a) Consider at least twenty spatially independent samples collected over three or more temporally independent sampling events."[53] The collection of this amount of samples, as well as the temporal range of samples, will greatly aid the Department in making an accurate assessment of impairment.

We are concerned, however, with the proposed language at R18-11-605(D)(2) which indicates that the Department may consider listing a surface water without the required number of samples or water quality exceedances mentioned in section R18-11-605(D)(1), if more than one temporally independent sample in any consecutive three year period exceeds certain acute or single sample maximum water quality standards. In truth, one sample alone cannot statistically or scientifically demonstrate that the pollutant requires a TMDL. A single sample can be an anomaly, arise from a one time event, or be a statistical outlier. For example, a truck spill on a nearby highway, although unquestionably damaging to the environment, may potentially lead to the listing of a nearby stream or segment under the currently proposed criteria.

To be valid, a TMDL must require that the pollutant in question be detected regularly and consistently. This requires the detection of a pollutant over a period of weeks or months, which in turn, implies that the pollutant be derived from a recurring and persistent source that can, and should, be effectively monitoring and regulated. The criteria as outlined in the proposed rule mistakenly allows a single positive sample to provide the basis to list a segment or surface water, thus contradicting the principles in the 'weight-of-evidence' approach. Also, the proposed single sample criteria fails to determine the significance or reality of a persistent environmental threat. Finally, the single sample criteria could result in burdensome work and an arguably poor use of the public's finite resources.

The proposed rule language that permits a one time or non-recurring event to serve as justification for listing a stream or segment should be stricken. As stated above, given the potentially large social and economic impact of a listing decision upon Arizona and the regulated community, We cannot support language that allows a listing consideration with less data. If data that is presented to the Department indicates that one temporally distinct acute or single sample maximum exceedance has occurred within an Arizona waterbody, then the Department should be obligated to immediately collect additional water quality samples to confirm the information provided. If the Department itself is responsible for the data collection, then the Department should bear the burden of collecting the appropriate and minimum number of samples discussed in section R18-11-605(D)(1).

ADEQ is obligated take a pro-active role, using field verification, in assuring that the information used by them for a listing decision is current, credible, scientifically defensible, and representative of conditions within the waterbody being assessed. This assurance of scientific validity can occur with the collection of verification samples and information by the Department, not by reducing the amount of information that needs to be collected and assessed.

Response: See response to comment 7 - 13 above.

In addition, the Department reiterates that the cites noted by the commenters do not allow listings based on single samples or even two samples, in most cases. It does permit the Department to list, based on EPA guidance, when more than one exceedance of a pollutant directly linked to severe toxic or human health effect has occurred. The data would have to satisfy the credible data requirements, including representativeness of the sampling conditions and comply with the general interpretation requirements, including statistical outliers. Most standards listed require multiple samples that must be collected over a period of weeks or months. More than one exceedance of this type of standard will likely provide clear evidence of recurrent or persistent concern.

As to the suggestions that the Department is "obligated to take a pro-active role" in data collection or followup, and the statement of "relative ease for ADEQ staff to collect current samples and information," as noted throughout the rule and Preamble, this rulemaking requires significant commitments on the part of the Department to expand its monitoring programs and to work closely with other monitoring entities to increase the database of information on Arizona's surface waters. This rulemaking will dramatically impact the Department's program over the next few years as resources are shifted from ambient and characterization monitoring to a more targeted, focused monitoring to assess the health of waters listed on both the 303(d) and Planning Lists. With the economic conditions of the state, monitoring resources will be stretched to the limit and the Department will be relying on partnerships with other state and federal agencies, local agencies, dischargers, and citizens to assist in the Department's mission of protecting the environment and public health.

The Department disagrees with the notion that there is a "large social and economic impact of a listing decision upon Arizona citizens." This rulemaking does not directly affect any discharger's rights or responsibilities and does not

have a direct financial or social impact on the stakeholder. Under the Clean Water Act, the Department has been responsible for identifying impaired waters for listing to EPA. This rulemaking implements A.R.S. § 49-232, which requires the Department to adopt the listing methodology in rule.

Once the waterbody is listed, a separate TMDL process provides the additional analysis and planning to address apparent water quality problems. Although the rule discusses prioritization factors and defines credible and scientifically defensible data, the TMDL process, itself, is not part of this rulemaking. The TMDL process may result in wasteload allocations that address point source discharges, but these allocations are not self-implementing. Both the TMDL process and the NPDES permitting process are carried out with full public participation and consider potential financial and social impacts associated with particular pollutant control alternatives. The federal regulations dealing with the NPDES program have specific requirements regarding point source discharges to impaired waters (40 CFR 122.44(d)) that operate independently of section 303(d) and require the permitting authority to consider a receiving water's attainment or nonattainment of water quality standards as part of the permit process. Listing a waterbody does not replace or supersede the NPDES requirements. No change has been made to the rule.

Comment 5 - 13: Under subsection (D)(2) relating to the 303(d) List, it states that there are certain conditions under which the Department may consider listing a surface water or segment on the 303(d) List with a more limited sampling. We believe this should state that the Department "shall" list if more than one sample demonstrates an exceedance of the acute water quality standard for a pollutant and there is more than one exceedance of an annual mean aquatic and wildlife chronic water quality standard.

Response: The Department appreciates the comment, but believes the language in this rule already provides the ability the commenter seeks. The structure of the rule, in evaluating waters for placement on either the Planning List (subsection (C)) or the 303(d) List (subsection (D)), requires that all available, credible data, and information be evaluated within the weight-of-evidence approach. Use of the weight-of-evidence approach does not preclude the state from determining, based on all the information available, that the one set of data is clear and convincing evidence of impairment and that the surface water should be listed based on the data. The language in subsections (C)(2) and (D)(3) allow for the decision. No change has been made to the rule.

Narrative Standards

Comment: 10 - 2: We support the rules proposal to require a narrative standard exceedance be further reviewed and evaluated using site specific criteria and procedures. We believe this Section not only provides additional safeguards to prevent inappropriate 303(d) listings, but more importantly, it ensures that scientifically sound data is incorporated into the decision making process when determining whether narrative standard violations are truly occurring.

Response: The Department appreciates the comment.

Comment 1 - 7 (October 4, 2001 comment letter): The proposed rule provides that narrative standards can be applied only if implementation procedures have been formally adopted. We believe that this provision conflicts with EPA regulations that require consideration of all applicable water quality standards in the list development process (40 CFR 130.7(b)). The proposed rule also establishes substantial barriers to the interpretation of narrative standards even in cases where implementation procedures had been adopted (e.g., R18-11-604(B)(2)) (requirements to show numeric standards are not protective and to provide additional evidence in subsections (a), (b), and (c), and (d)) (provisions which only address toxicity narrative standards and do not address how data and information will be considered to address other narrative standards)). In addition, the proposed rule provides no information about how non-traditional data (e.g., sediment, animal tissue, physical and biological data will be considered) and information (e.g., advisories, information on fish kills, reports of taste and odor problems, and other non-quantified information) would be considered in assessing narrative standards exceedances. We believe that the Department's methodology should demonstrate that these non-traditional types of data and information are carefully considered in the assessment process.

We believe that, unless the Department has adopted formal implementation procedures, provisions that bar the assessment of narrative standards exceedances conflict with 40 CFR 130.7(b)(3), which requires assessment of all applicable water quality standards, including narrative criteria, in the listing process.

Comment 1 - 9 (October 4, 2001 comment letter): The revised rule continues to suggest that narrative standards cannot be applied unless implementation procedures have been formally adopted. As described in our October 4, 2001 comments, this prohibition conflicts with federal listing requirements. Please see our October 4, 2001 comments for further discussion of this concern.

The proposed rule provides that narrative standards can be applied only if implementation procedures have been formally adopted. We believe that this provision conflicts with EPA regulations that require consideration of all applicable water quality standards in the list development process (40 CFR 130.7(b)). The proposed rule also establishes substantial barriers to the interpretation of narrative standards even in cases where implementation procedures had been adopted (e.g., R18-11-604(B)(2)) (requirements to show numeric standards are not protective and to provide

additional evidence in subsections (a), (b), and (c), and (d)) (provisions which only address toxicity narrative standards and do not address how data and information will be considered to address other narrative standards)). In addition, the proposed rule provides no information about how non-traditional data (e.g., sediment, animal tissue, physical and biological data will be considered) and information (e.g., advisories, information on fish kills, reports of taste and odor problems, and other non-quantified information) would be considered in assessing narrative standards exceedances. We believe that the Department's methodology should demonstrate that these non-traditional types of data and information are carefully considered in the assessment process.

We believe that, unless the Department has adopted formal implementation procedures, provisions that bar the assessment of narrative standards exceedances conflict with 40 CFR 130.7(b)(3), which requires assessment of all applicable water quality standards, including narrative criteria, in the listing process.

Response: The rule provides that under A.R.S. § 49-232(F), the Department must adopt implementation procedures that specify the objective basis for determining whether a violation of narrative standards has occurred before listing a surface water on the 303(d) List. This is in keeping with several EPA guidance documents that provide that states should develop narrative implementation guidance to interpret narrative standards including: "EPA recommends States, Territories, and authorized Tribes translate the applicable narrative criteria on a site-specific basis or adopt site specific numeric criteria. (Guidance: Use of Fish and Shellfish Advisories and Classifications in 303(d) and 305(b) Listing Decisions)," and "EPA encourages states, territories and authorized tribes to use chemical data to interpret narrative criteria, however, these jurisdictions should develop implementation procedures that explain how different types of chemical data are used to make attainment/impairment decisions based on narrative criteria." (EPA Draft CALM Guidance, April, 2001)

EPA also expresses concern over A.R.S. § 49-232(E) where the Department must provide justification that numeric criteria are insufficient to protect a waterbody if it is determined to be impaired based on a narrative criteria. The Department believes that this is analogous to the documentation requirement in 40 CFR 130.7(b)(6) to support a listing decision. This rulemaking outlines a number of factors that should be considered in determining whether the numeric criteria alone is insufficient to protect the surface water. Those factors are found in R18-605(B)(2)(e) and include:

i. The narrative standard data provides a more direct indication of impairment as supported by professionally prepared and peer-reviewed publications;

ii. Sufficient evidence of impairment exists due to synergistic effects of pollutant combinations or site-specific environmental factors; or

iii. The pollutant is bioaccumulative, relatively insoluble in water, or has other characteristic that indicate it is occurring in the specific surface water or segment at levels below the laboratory detection limits, but are at levels sufficient to result in impairment.

The commenter states that the proposed rule provides no information about the use of non-traditional data, for example, sediment, animal tissue, physical and biological data will be considered, and information, such as advisories, information on fish kills, reports of taste and odor problems and other non-quantified information, in making listing decisions. Absent numeric data, use of non-traditional data and information would have to be detailed in a narrative implementation procedure that must be adopted through the state rulemaking process, as noted above. However, while those procedures are being developed, R18-11-605(B)(2) provides for the Department to consider: "[s]oil type, geology, hydrology, flow regime...characteristics of a pollutant...available evidence of direct or toxic impacts on aquatic life, wildlife, or human health, such as fish kills and beach closures..." Specifics regarding how the Department will evaluate this data will be described in either a narrative implementation procedures document or a separate technical support document. In addition, with the exception of fish consumption advisories and beach closures, the Department is not aware of a formal listing, based solely on a narrative standards violation, where there hasn't been evidence of numeric standards exceedances.

Comment 7 - 31b: Procedures for Applying Narrative Standards: As we point out in our January 3, 2002 letter (Attachment 1, p. 10-11), the basis for EPA's concerns regarding the clarification that narrative standards cannot be used for listing purposes until implementation procedures have been adopted is unclear because EPA's own guidance documents recommend that states develop implementation procedures to determine how narrative standards will be interpreted. Without these procedures, the application of narrative standards is simply inappropriate (and illegal for state law purposes) as the basis for any listing decision.

We also point out that listings based on general narrative criteria, where the state has not developed objective implementation guidance or detailed criteria, has proven problematic in other states. See, e.g., order in Monongahela Power Co. et al. v. Department of Environmental Protection, Kanawha County Circuit Court (Civ. No. 99-AA-66) (W. Va., April 30, 2001), Pars. 82-85 (court rules state cannot list water as impaired based on a finding of biological impairment without first adopting biological criteria - beyond general narrative statements -in the state's surface water quality standards) (copy included as Attachment 10).

Response: The Department appreciates the comment.

Comment 9 - 4: The criteria outlined in R18-11-605(B)(2) is vague and should be addressed in the narrative rulemaking cited by the Department for later this year.

R18-11-605(B)(2)(e), sets forth narrative standards that are vague. For example, the proposed rules state that Department may justify listing based upon narrative standard data that "provides a 'more direct indication of impairment' as supported by professionally prepared and peer-reviewed publications."[48] However, the proposed rules fail to define what is a 'more direct indication of impairment;' and, as such, the rule is vague and open to future arbitrary, or discriminatory enforcement by the Department.[49] Equally troubling is the catchall phrase incorporated in this section of the proposed rule that permits a finding of impairment based upon "other characteristics that indicate it (the pollutant) is occurring in the specific surface water or segment at levels below the MDL, but are at levels sufficient to result in impairment."

The inclusion of these types of 'narrative criteria' fails to meet the burden imposed by the Legislature to identify *specific* reasons (that are based on scientifically accepted principles) as to why the water in question, is impaired.[50] In addition, the narratives addressing 'bioaccumulative pollutants' are also vague and fail to address how they will be used to evaluate the regulated community.

Comment 9 - 6: The criteria outlined in R18-11-605(B)(2), should be considered in the anticipated rulemaking on the Narratives Standards.

The terminology and concepts outlined in R18-11-605(B)(2)(e) do not comport with the Legislature's mandate to base narrative and biological findings for listing on specific reasons, appropriate to the water in question which are based on generally accepted scientific principles in support of such a finding.[51] Therefore, we request that the Department excise the references to R18-11-605(B)(2)(e) from this rulemaking and respectfully suggests that they reconsider them during the development of the narrative standards implementation procedures. ADEQ affirmatively stated their intent to embark upon rulemaking for the remaining narrative standards implementation procedures after the formal adoption of this rule in the preamble to these proposed rules.[52] Thus, the opportunity to fulfill the clear intent of the Legislature for the development of specific and scientifically based reasons for the narrative and biological standards developed may require further attention.

Response: The Department disagrees. Subsection (B)(2)(e) requires the Department to "justify the listing based on the factors outlined in the rule. The justification in each case requires evidence to support the finding, including, where appropriate, professionally prepared and peer-reviewed publications. All the possible combination of factors cannot be enumerated in the rule, rather the rule is structured to require the Department to document, based on sound, scientific evidence, that impairment exists and the numeric standard alone is insufficient to protect the designated uses.

How the Department will define bioaccumulative pollutant is answered in the response to comment 7 - 22 below.

Bioaccumulation

Comment 7 - 22: Subsection (B)(2)(e)(iii). The proposal indicates that ADEQ will evaluate the bioaccumulative nature of a pollutant in determining whether to list based on narrative standard exceedances where no numeric standards are exceeded (R18-11-605(B)(2)(e)(iii)). How does ADEQ plan to determine what constitute bioaccumulative pollutants? This is a topic of some debate on the national level.

Response: For the purpose of implementing the narrative toxic standard, the Department defines "bioaccumulative pollutant" as a toxic compound that can be taken up by an aquatic organism, through any route, including respiration, ingestion, or direct contact with water or sediment. Violation of the narrative toxic standard is when the pollutant has accumulated in the tissue of fish or other aquatic animals to a concentration that presents a risk to human health as determined by EPA approved procedures.

Most known toxic chemicals do not have numeric toxicity standards and not all toxic chemicals are persistent or bioaccumulative. The EPA Integrated Risk Information System (IRIS) database contains human health assessment information for over 540 different chemicals and over 68,700 different chemicals have been registered in EPA's Chemical Registry System (CRS). In contrast, the Department's surface water quality standards establish numeric standards for approximately 160 chemicals and classes of chemicals. The Clean Water Act list of priority pollutants contains only 126. It is the primary function of the narrative water quality standard to address the hazards presented by pollutants and combinations of pollutants that do not have numeric water quality standards. No change has been made to the rule.

Bioaccumulation is site, species and chemical specific. It is also affected by the structure of the aquatic community and food web, trophic status and the water chemistry of the subject aquatic ecosystem. This is why it is important to use toxic concentrations in fish tissue as an indicator rather than water column concentrations. Concentration in fish tissue is the end product of bioaccumulation. When considering whether the Fish Consumption designated use is being supported, it is far more precise to directly measure the end product. No change has been made to the rule.

Narrative Implementation Procedures for Toxicity (fish consumption advisories)

Comment: 6 - 6a: The factors listed in proposed R18-11-604(D)(3) do not relate to compliance with the narrative water quality standard for toxicity.

Response: The Department thanks the commenter for pointing out the typographical error. Subsection (D) has been renumbered to mirror subsection (C) and the requirement in the renumbered subsection (D)(2) has been changed to "shall place" rather than "may consider placing" to be consistent with the other subsections. After renumbering, the reference to R18-11-604(D)(3) for narrative water quality standards is correct.

Comment 9 - 5: Bioaccumulative pollutant needs to be clearly defined in rule. R18-11-605(B)(2)(e)(iii), states that an impairment may based upon bioaccumulative pollutants, but neglects to identify how the Department will define a 'bioaccumulative pollutant.' For a bioaccumulative assay to be scientifically valid, three conditions must be met: (1) the presence of bioaccumulative pollutant in three or more samples, with the percentage of positive assays being no less than twenty-five percent out of total assays; (2) sufficient mean-residence time for the subject fish; and, (3) the bioaccumulative pollutant identified must be detected in the water in question.

The assay samples must affirmatively detect the presence of a bioaccumulative pollutant in relevant fish tissue samples, and the ecology and feeding habits of the particular fish species should be considered in the analysis as well. Moreover, in each positive case, the fish from which the tissue sample is taken, must have a demonstrated minimum mean residence time in the water in question for a time-period sufficient to allow for significant uptake of said pollutant. A sufficient mean residence time typically ranges from a period of weeks to months. Notably, heavy metals and other bioaccumulative pollutants also may be taken up by the subject fish in its previous environs. Consequently, to positively determine that the bioaccumulative pollutant is present in the water in question, there must be a minimum of three spatially and temporally distinct environmental assays that positively detect the presence of the bioaccumulative pollutant in the water in question.

The proposed rule as written fails to identify the necessary criteria for listing based upon the detection of a bioaccumulative pollutant. The regulated community is entitled to prior knowledge of the criteria for any potential enforcement actions or pollutant loading allocation consequences. Therefore, all narrative criteria for potentially listing a water as impaired must be specifically and clearly defined in rule.

Comment 6 - 6b: This proposed rule would allow listing a water as impaired on the basis of fish advisories and fish tissue analyses, supposedly because those factors indicate compliance with the narrative standard for toxicity. As discussed above, the water quality standards apply only to the water, not fish tissue, so fish advisories do not show compliance. Compliance with any of the water quality standards may be assessed only by specified analytical test methods. A.A.C. R18-11-111. Those methods apply only to water. Fish tissue testing is not one of the approved analytical methods.

EPA approved Arizona's and every other states' narrative standards even though the states have not historically used fish tissue analyses to determine compliance with the narrative toxicity standard. Since the narrative toxicity standards have historically been approved without reference to fish advisories and fish tissue analyses, ADEQ cannot argue that this is required by the CWA.

Fish consumption advisories and fish tissue analyses are not covered by the existing narrative water quality standard. ADEQ is developing a new definition for an existing rule under the guise of "interpreting" the rule.

Such reinvention by interpretation, if it is to be done at all, must be preceded by analysis of the factors for setting water quality standards under A.R.S. §§ 49-221 and 49-222. In particular, ADEQ has not considered in this rulemaking the uses of the waters to which this standard applies and the "economic, social and environmental costs and benefits" of this new approach. A.R.S. § 49-221(B). The statutory factors must be considered on the record before expanding the narrative standard.

The Rule states that the appropriate criteria for a fish advisory are specified in a publication titled *Narrative Toxicity Standard 303(d) Implementation Procedures*, January 2002. While we commented on the August 24, 2001 version of this procedure, we have not yet seen the new version to determine whether our comments were considered. Since we have not had the opportunity to procure a copy of the January 2002 revision, we are submitting our previous comments within the body of this letter.

We believe that the purpose of the *Narrative Toxicity Standard 303(d) Program Implementation Procedures* (NTSPIP) is inappropriate. We agree with ADEQ's statement, "It is practically impossible to safeguard against the concentration of bioaccumulable toxicants in the tissues of aquatic animals through the use of numeric water quality standards alone." We also agree that issuing fish advisories is an appropriate response to excessive concentrations in fish tissues. However, we do not agree that a fish advisory is either a sufficient or appropriate basis for listing waters as impaired under section 303(d) of the Clean Water Act.

We believe that the purpose of the NTSPIP should be to describe in detail how ADEQ will determine when a fish advisory needs to be issued. How a fish advisory is used in determining whether a waterbody should be listed as an impaired water is irrelevant in a rule regarding narrative water quality standard implementation procedures.

In addition to being irrelevant, the section of the NTSPIP titled *Applicability in 305(b) and 303(d) listing decisions* contradicts this rulemaking. According to the proposed NTSPIP, a fish consumption advisory is adequate to list a water as impaired under section 303(d) of the Clean Water Act. However, section 604.B.1 (Weight-of-evidence) of this rulemaking says that the Department will *consider* a fish consumption advisory, among other factors, in determining "if the evidence supports a finding of impairment." We believe that all criteria affecting 303(d) listing decisions must be contained only in this rulemaking to avoid conflicts and to ensure that the continuity and integrity of this rulemaking is maintained. It is logical and appropriate for this rulemaking to reference an implementation guidance or other formal document as a tool for determining an impaired water listing but it is neither logical nor appropriate for that implementation guidance or other formal document to dictate when a water is going to be listed as impaired.

We believe that ADEQ has mischaracterized EPA's recommendation regarding the use of fish advisories to list waters pursuant to 303(d). ADEQ states in the NTSPIP, "The USEPA recommends that states use fish or shellfish consumption advisories in determining attainment [sic] water quality standards and listing impaired waterbodies under section 303(d) of the Clean Water Act (Grubbs and Wayland, pers. Com.)." The referenced letter by Grubbs and Wayland recommends that states include on their 303(d) lists "waters where a fish or shellfish consumption advisory or NSSP classification *demonstrates non-attainment of water quality standards*…" (emphasis added). The NTSPIP does not clearly describe how a fish or shellfish consumption advisory will demonstrate non-attainment of water quality standards. The Grubbs and Wayland letter continues by clarifying that non-attainment of water quality standards includes that "…the risk assessment parameters of the advisory or classification are *cumulatively equal to or less protective than those in the water quality standards*." (emphasis added). Unless ADEQ can make a link between an advisory and the non-attainment of a water quality standard, neither the waterbody nor the stressor may be listed pursuant to 303(d).

The data obtained using the NTSPIP does not appear to be subject to the same data quality assurance as other data intended to be used in evaluating water body impairment. Under proposed R18-11-604(D), fish advisories could be used to list impaired waters. State law requires that all data used to make these decisions meet the data quality requirements of A.R.S. § 49-232. All data used in the fish tissue advisory calculations and analysis therefore must meet the requirements under proposed R18-11-602 and R18-11-603 if they are to be used for impaired water listing decisions. It is not clear from the rule and the policy that this is the case. In fact, the data gathering and analysis process listed in the policy at 7 A.A.R. 3686 does not appear to meet the requirements of state law. While the NTSPIP may not need to include any references to data quality assurance, we believe that ADEQ should clarify in the Preamble that these data cannot be used to list a water as impaired unless they meet the requirements of R18-11-602.

We request clarification on whether Appendix A and Appendix B are examples as indicated in the main body of the NTSPIP or if they are intended to be implemented as written to determine the necessity of issuing a fish-consumption advisory. The Appendices include specifics such as "The State is committed to protecting the most vulnerable portions of the population…" and "…the implementation of fish consumption advisory analysis would be calculated using the following formulas:." Neither statement supports the notion that Appendices A and B exist only for the purpose of giving examples. Since the risk analysis procedures are presented as examples, the public cannot know how ADEQ will determine the need to issue a fish advisory. The public needs to be given a clear description of these procedures and how they will be implemented. The NTSPIP is so open-ended that ADEQ could issue a fish advisory for nearly any water in the state. In addition, these Appendices contain definitions for subsistence consumption, regular consumption and sport-fishing consumption. Are we to infer that these definitions are examples and thus, subject to change?

The NTSPIP says that human health risk analyses will be performed but does not indicate how they will be done as the referenced document, EPA 2000b, is not listed in the References section of the NTSPIP. It is assumed for the purposes of compiling comments that the NTSPIP intends to reference EPA 2000 (Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories Volume 2: Risk Assessment and Fish Consumption Limits. Third Edition. Office of Water EPA 823-B-00-008). The equations used in the risk analysis include several variables/assumptions including maximum allowable fish consumption rate in meals/month, maximum allowable fish consumption rate in kg/d, acceptable risk level, average meal-size, and consumer body-weight. While these equations appear to be appropriate to determine the screening concentration, the NTSPIP does not address how the variables/assumptions will be determined. The NTSPIP should explain how the variables/assumptions will be determined and the rationale for their determination.

The guidance document for issuing fish advisories includes three different equations for calculating the potential risk posed by fish tissue. 7 A.A.R. 3688. The guidance also states that "The State is committed to protecting the most vulnerable portions of the population and where significant uncertainty exists, will err on the side of conservatism." Id.

We support the goal of public health protection and agrees that the most vulnerable portions of the population must be protected. However, we are concerned that this policy may be too overprotective, will lead to false positive risk assessments, and that the policy does not meet the statutory data quality requirements for using the fish advisories in the impaired waters decision-making process.

The policy should be carefully evaluated to ensure that it will not err too heavily on the side of issuing fish advisories for situations where there is in fact no significant public health risk. This is the problem of the false positive risk

assessment. The equations should be rechecked to assure that they are not too conservative. ADEQ should apply the guidance with accuracy, not conservatism, as the primary objective.

We urge ADEQ to conduct further analysis of the fish advisory policy until more real world verification is done and the results are discussed with stakeholders. We recommend that ADEQ run calculations with these equations on fish tissue taken from a number of lakes and streams in the state to determine whether the equations would yield fish advisories for fish taken from popular fishing spots. Is there a correlation between fish tissue advisories and ambient water quality? A high rate of fish advisories, or if fish advisories arise on a number of high quality waters, would indicate that the guidance may be too conservative and too prone to false positives.

The use of an overly conservative fish advisory policy could jeopardize our urban fishing program. Some City park lakes are popular fishing spots. Those lakes do not receive significant outside toxic pollutant loads other than possibly air deposition. The only way we could control water quality for toxic pollutants would be to install treatment plants to treat the canal water and wells used to fill the lakes. That is prohibitively expensive and would detract from the ambiance of the parks. ADEQ should carefully evaluate the real world impacts of the fish tissue analysis process to ensure that the policy does not lead to unnecessary conservatism or false positive conclusions.

Comment 7 - 19: ADEQ references a January 2002 narrative toxicity standard guidance (relating to listings based on fish consumption advisories) in the proposal (R18-11-605(D)(3)). The only version of this document we have been able to locate is dated February 2002, and is still marked "draft." This raises potential concerns under A.R.S. § 49-232(F) and the Arizona Administrative Procedure Act, since the proposal incorporates by reference a version that is not easily accessible and therefore cannot readily be reviewed as part of this comment period.

Comment 7 - 32: With regard to listings based on fish advisories, such listings should occur only if the risk assessment parameters of the advisory are cumulatively equal to or less protective than those used in setting fish consumption water quality standards. This is consistent with EPA guidance on this topic. See EPA, Guidance: Use of Fish and Shellfish Advisories and Classifications in 303(d) and 305(b) Listing Decisions (WQSP-00-03) (October 24, 2000), at p. 5

Comment 8 - 22: Subsection (D)(3)(b). The "Narrative Toxicity Standard 303(d) Implementation Procedures" dated January 2002 were not made readily available to stakeholders. As such, it is not appropriate to include this here. Also, any implementation procedures should undergo a separate rulemaking or public review process. We have not had the opportunity to review this document and do not know where it is available. We would greatly appreciate receiving a copy of this document, so that we can provide formal written comments on these implementation procedures.

Comment 4 - 7: Subsection (D)(3)(b).

1. The Narrative Guidelines incorporate water quality standards.

In Arizona, regulations which impose classifications affecting various levels of violations are not merely internal matters but set forth the procedures and practices of the agency. Thus, they must be adopted pursuant to the Arizona Administrative Procedures Act.[7] The Narrative Guidelines are for all intents and purpose Water Quality Standards because they incorporate trigger classification for violations.

2. The Narrative Guidelines implement the law and policy of the state and describe the practice and procedures of ADEQ and are therefore considered rules under Arizona law.

The director of the Arizona Department of Environmental Quality (ADEQ) is required to adopt by *rule,* water quality standards for all navigable waters and for all waters in all aquifers.[8] In addition, this state legislative mandate to adopt water quality standards by rule extends to implementation guidelines of general applicability.[9] Arizona law mandates that implementation guidelines be in rule.[10] As stated in Section A (1) *supra,* before listing a water as impaired based upon a narrative or biological surface WQS, the Department must adopt implementation procedures that specifically identify the objective basis for determining that a violation of the narrative or biological criterion exists.[11] By definition, pursuant to the Arizona Administrative Procedures Act, the state legislative mandate to adopt water quality standards by rule ostensibly extends to these legislatively mandated implementation guidelines of general applicability.[12]

It is presumed that the legislature knows of the existing laws when it passes a statute.[13] Since the Arizona Legislature specifically required that agency statements of general applicability which implement the procedures and practices of an agency be set forth in rule, it is presumed that they were aware of this when they mandated that the Department adopt the implementation procedures for determining a violation of a narrative WQS.

To be considered a rule, a statement must be "of general applicability and have a future effect."[14] The Narrative Implementation Procedures have "general applicability" because they will presumably be regularly and routinely applied to implement the standards contained in the regulations and law.[15] Ostensibly, the Narrative Implementation Procedures will provide the public and the Department with the precise methods which will be used in conducting the implementing decision criteria for the narrative standards. The guidelines contained in the Narrative Implementation Procedures are set to be applied statewide for determining whether or not the narrative WQS has been violated.

Further, they will have the "future effect" of establishing a firm criteria for evaluating the narrative listing factors throughout Arizona. Thus, the Narrative Implementation Procedures clearly meet the criteria of a statement of general applicability that implements, interprets or prescribes law or policy, or describes the procedure or practice requirements of an agency and therefore, pursuant to A.R.S. § 41-1001(17), they must be defined in rule to be valid.[16]

The Department should remove reference to the Narrative Implementation Procedures as a part of this rulemaking in preference to a separate stakeholder process and rulemaking for the Narrative Implementation Procedures as discussed above.

ADEQ specifically chose not to adopt its Narrative Toxicity Standard Implementation Guidelines, (Narrative Guidelines), via the rulemaking process. According to Arizona's Regulatory Bill of Rights the fact that the Narrative Guidelines were not properly adopted by rule essentially renders them void.[17]

The Narrative Guidelines are Water Quality Standards under Arizona law and ADEQ was required to adopt them by rule. Therefore, in light of the fact that the Narrative Guidelines are water quality standards that were never officially adopted by the state of Arizona, EPA and the state may not rely upon them. Arizona does not have legally valid narrative toxicity implementation guidelines at this time.

Comment 4 - 8: Subsection (D)(3)(b). The narrative implementation procedures referenced in the proposed rule should be removed from the proposed 303(d) listing rule and reviewed in a separate rulemaking.

We object to the inclusion of the Narrative Toxicity Standard 303(d) Implementation Procedures, (Narrative Implementation Procedures) in the proposed rulemaking for the listing and delisting of the 303(d) impaired waters criteria.[18] Although the Department stated in the proposed rule that they had published the Narrative Implementation Procedures in January 2002, the Narrative Implementation Procedures were unavailable to the public for review during the current comment period.[19] The Narrative Implementation Procedures must be available to the public during the comment period. The fact that the Narrative Implementation Procedures have been unavailable and referenced as a listing criteria in the proposed rule negates the legal validity of this document in reference to this rulemaking. The Department's intent is to set forth in rule, that the appropriate criteria to evaluate whether or not a narrative water quality standard (WQS) violation has occurred, is through the issuance of a fish consumption advisory. If evidence of impairment exists based upon the criteria set forth under the Narrative Implementation Procedures, then a fish advisory may be issued. Once a fish advisory has been issued, the Department is mandated under the proposed rules to consider placing the surface water or segment on the 303(d) List under R18-11-108(A)(5).[20]

The Arizona Legislature has set forth in law, the criteria for determining whether or not the data considered for the physical and biological health of water quality is credible and scientifically defensible.[21] The criteria for determining the scientific validity includes a mandate that the sampling and analysis methodology used, be generally accepted and validated in the scientific community as appropriate for assessing the condition of the water.[22] Further, before listing a water as impaired based upon a narrative or biological surface WQS, the Department must adopt implementation procedures that specifically identify the *objective* basis for determining that a violation of the narrative or biological criterion exists.[23] The Arizona Regulatory Bill of Rights ensures a fair and open regulatory process by providing that a person may review the full text or summary of *all* rulemaking activity.[24] Given the gravity of the consequences associated with a potential violation of a WQS or having a stream segment added to the 303(d) List, it is critical that the criteria outlined in the Narrative Implementation Procedures be based upon objective and sound science. Accordingly, the public, interested stakeholders, and the scientific community must be permitted to review whether the content of the Narrative Implementation Procedures is based upon objective and scientifically defensible, credible data. By submitting the proposed rulemaking to the Secretary of State with the Narrative Implementation Procedures unavailable for review, the Department has effectively usurped the scrutiny of review in the rulemaking process that is necessary to determine scientific validity and objectivity of the sampling and analysis procedures proposed therein. Therefore, we request that the references to the Narrative Implementation Procedures be excised from the proposed rulemaking until such time as they are submitted to the public for review and comment.

Comment 9 - 9: The *Narrative Implementation Procedures* referenced in the proposed rule should be removed from the proposed 303(d) listing rule and reviewed in a separate rulemaking.

We respectfully object to the inclusion of the *Narrative Toxicity Standard 303(d) Implementation Procedures*, (*Narrative Implementation Procedures*) in the proposed rulemaking for the listing and delisting of the 303(d) impaired waters criteria.[54] Although the Department stated in the proposed rule that they had published the *Narrative Implementation Procedures* in January 2002, the *Narrative Implementation Procedures* were, for all intents and purpose, unavailable to the public for review during the current comment period.[55] In addition to stakeholders not having a chance to properly review and comment on the *Narrative Implementation Procedures*, standards or guidelines that define the criteria for a potential for the violation of a Water Quality Standard (WQS) should be in set forth in rule.

1. The *Narrative Implementation Procedures* Must be available to the Public During the Comment Period.

When the *Narrative Implementation Procedures* were forwarded to stakeholders, shortly before the close of the comment period, they were stamped "DRAFT February 1, 2002."[56] The fact that the *Narrative Implementation Procedures* have been unavailable and referenced as a listing criteria in the proposed rule, and, they are still in draft form, is problematic.

The Department states that they are adopting the *Narrative Implementation Procedures* concurrently with this rulemaking. And, the purpose of the *Narrative Implementation Procedures*, is to outline the procedures for developing and issuing fish consumption advisories in Arizona, in support of the narrative toxic standards.[57] If evidence of impairment exists based upon the criteria set forth under the *Narrative Implementation Procedures*, then a fish advi-

sory may be issued. Once a fish advisory has been issued, the Department is mandated under the proposed rules to consider placing the surface water or segment on the 303(d) List under R18-11-108(A)(5).[58]

The Arizona Legislature has set forth in law, the criteria for determining whether or not the data considered for the physical and biological health of water quality is credible and scientifically defensible.[59] The criteria for determining the scientific validity includes a mandate that the sampling and analysis methodology used, be generally accepted and validated in the scientific community as appropriate for assessing the condition of the water.[60] Further, before listing a water as impaired based upon a narrative or biological surface WQS, the Department must adopt implementation procedures that specifically identify the objective basis for determining that a violation of the narrative or biological criterion exists.[61]

The Arizona Regulatory Bill of Rights ensures a fair and open regulatory process by providing that a person may review the full text or summary of *all* rulemaking activity.[62] Given the gravity of the consequences associated with a potential violation of a WQS or having a stream segment added to the 303(d) List, it is critical that the criteria outlined in the *Narrative Implementation Procedures* be based upon objective and sound science. Accordingly, the public, interested stakeholders, and the scientific community must be permitted to review whether the content of the *Narrative Implementation Procedures* is based upon objective and scientifically defensible, credible data.

By submitting the proposed rulemaking to the Secretary of State with the *Narrative Implementation Procedures* unavailable for review, the Department has effectively usurped the scrutiny of review in the rulemaking process necessary to determine scientific validity and objectivity of the sampling and analysis procedures proposed therein. Also, over the past several years, the Department has been unable to finalize the generations of draft iterations of their proposed *Narrative Implementation Procedures*. Consequently, point and non-point source stakeholders are effectively subject to changing enforcement standards with no guarantee of scientific validity and no 'pre-enforcement' mechanism for a challenge thereof. Therefore, we respectfully request that the references to the *Narrative Implementation Procedures* be excised from the proposed rulemaking until such time as they are submitted to the public for review and comment; and, subsequently adopted in rule.

2. The *Narrative Implementation Procedures* must be developed in rule.

To avoid a claim that the Department's *Narrative Implementation Procedures* are not unconstitutionally vague, point and non-point sources must be given clear and fair notice of what is prohibited.[63] Thus, the *Narrative Implementation Procedures* must be formally adopted in rule and cannot be referenced in an ever-changing draft form. Arizona law mandates that implementation guidelines be in rule.[64] As previously stated, before listing a water as impaired based upon a narrative or biological surface WQS, the Department must adopt *implementation procedures* that specifically identify the objective basis for determining that a violation of the narrative or biological criterion exists.[65] By definition, pursuant to the Arizona Administrative Procedures Act, the state legislative mandate to adopt water quality standards by rule ostensibly extends to these legislatively mandated *implementation guidelines of general applicability.*[66]

It is presumed that the legislature knows of the existing laws when it passes a statute.[67] Since the Arizona Legislature specifically required that agency statements of general applicability which implement the procedures and practices requirements of a agency be set forth in rule, it is presumed that they were aware of this when they mandated that the Department *adopt* the *implementation procedures* for determining a violation a narrative WQS.

To be considered a rule, a statement must be "of general applicability and have a future effect."[68] The *Narrative Implementation Procedures* have "general applicability" because they will presumably be regularly and routinely applied to implement the standards contained in the regulations and law.[69] Presumably, the *Narrative Implementation Procedures* will provide the public and the Department with the precise methods which will be used in conducting the implementing decision criteria for the narrative standards.

The guidelines contained in the *Narrative Implementation Procedures* are set to be applied statewide for determining whether or not the narrative WQS has been violated. Further, they will have the "future effect" of establishing a firm criteria for evaluating the narrative listing factors throughout Arizona. Thus, the *Narrative Implementation Procedures* clearly meet the criteria of a statement of general applicability that implements, interprets or prescribes law or policy, or describes the procedure or practice requirements of an agency and therefore, pursuant to A.R.S. § 41-1001(17), they must be defined in rule to be valid.[70]

Respectfully, we submit that the Department should reconsider the inclusion of the *Narrative Implementation Procedures* in this rulemaking, until the *Procedures* are the subject of a specific or focused rulemaking.

Response: After further review of the "Narrative Toxicity Standard Implementation Procedures," the Department is deleting the specific reference to the fish consumption advisory as a basis for listing. The Department is undertaking a separate stakeholder effort, outside of this rulemaking, to develop implementation procedures for narrative water quality standards, including narrative nutrients, bottom deposits, and toxicity (including fish consumption advisories). Once these procedures are developed, this rule and the surface water standards rule (Title 18, Chapter 11, Article 1), will be reopened, as needed, and the implementation procedures will be adopted in rule.

DELISTING

Comment 1-8c: Arizona's proposed rule does not include a separate binomial testing provision for considering potential delistings of waters on a prior 303(d) List, a provision that Florida adopted. We understand that ADEQ believes such a provision would be inconsistent with Arizona's credible data law. However, it would be reasonable to argue that Florida's delisting approach is no more stringent than its listing approach in that it applies the same binomial statistical test but essentially reverses the null hypothesis based on prior credible information to inform the basis for the assessment null hypothesis. From a statistical analysis standpoint, Florida's delisting approach is less stringent than its listing approach because it sets a lower confidence level to permit delisting (85%) than it does for listings (90%). This delisting approach is consistent with established statistical practice (see Lin, et al, 2000 and Smith, et al., 2001) and appears to make fuller use of available data and information in the listing process. Since we understand ADEQ is unlikely to incorporate a separate delisting test as Florida did, we simply observe that the Arizona approach may be less environmentally protective as a result.

Response: A.R.S. § 49-232(C)(4)) states that "[t]he criteria for removing a water from the list of impaired waters shall not be any more stringent than the criteria for adding a water to the list." Given the statutory mandate, the Department is dealing with the process to remove a surface water, segment, or pollutant from the 303(d) List in the same manner as the process for listing. In other words, if there is "X" amount of data indicating impairment, then to remove the water from the list would require at least "X" amount of data of the same or higher quality. While this approach does not incorporate a separate binomial table specific to delisting, the process sends the analyst back through the listing process in subsection (D) to evaluate the same criteria that resulted in the waterbody being listed. Given that the approach is essentially the listing process in reverse, the Department believes that the listing and delisting processes are comparable. The Department disagrees that "Arizona's approach is less environmentally protective as a result."

Florida's rule has a number of different delisting options based on the type of data or information that resulted in the listing, such as water chemistry, bioassessments, fish consumption advisories, and toxicity testing. For waters that were listed due to failure to meet aquatic life use support based on water quality criteria exceedances or due to threats to human health based on exceedances of single sample criteria, the Florida rule establishes a third binomial method table (30 sample minimum) based on a minimum 90 percent confidence level that assumes a maximum exceedance frequency of 10 percent. For examples, at the minimum sample size of 30, there can be no (zero) exceedances to allow delisting. For samples sizes 38 - 51: the maximum number of exceedances allowable to allow delisting is one. The Department's understanding of this procedure suggests a significantly higher number of samples required to delist the surface waters.

Comment 1 - 13: We remain concerned that the delisting provisions in R18-11-605(E) are too vague. The state's rationale for the separate delisting section is unclear and should be described more clearly. We are also concerned that subsection (E)(1)(f) describes a new natural sources exclusion that appears to be inconsistent with the existing natural sources exclusion contained in Arizona's approved water quality standards. If Arizona intends to modify its water quality standards through the impaired waters rulemaking, these standards changes would need to be submitted to EPA for approval before they are effective. We are very concerned that the provision in this segment would lead the state to essentially ignore human-caused pollutant loadings to some waters simply because natural background loading levels are relatively high. The state should clarify if and how this provision would be applied in practice, and how it is consistent with applicable standards.

Response: The rule contains a separate delisting subsection primarily for clarity. There are a number of different ways for a surface water to be removed from the impaired waters list, including finding that the listing was in error. If the Department included this information in subsection (D), some of the delisting provisions, other than number of exceedances of standards, might be overlooked.

The Department established the provisions for delisting surface waters from the requirements in 40 CFR 130.7(b)(6)(iv), which requires each state to show" good cause" for not including a water on the list. Good cause includes, but is not limited to, more recent or accurate data under R18-11-605(E)(2)(a)(ii); more sophisticated water quality modeling under R18-11-605(E)(2)(a)(v); flaws in the original analysis that led to the listing under R18-11-605(E)(2)(a)(v); or changes in conditions under R18-11-605(E)(2)(a)(iii), R18-11-605(E)(2)(a)(iii)(iv), R18-11-605(E)(2)(a)(iii)(v) and R18-11-605(E)(2)(a)(iii)(E)(2)(d). In addition to the federal requirements for good cause, the Department added the ability to delist a waterbody when a TMDL has been developed and approved by EPA, under subsection (E)(2)(a)(i), (also category 4a in EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*), or where naturally occurring conditions alone are the cause of the impairment under R18-11-605(E)(1)(f).

The Department included the natural conditions provision as a basis for delisting because the state's surface water quality standards, as approved by EPA, currently provide that where the concentration of a pollutant exceeds a water quality standard and the exceedance is not caused by human activity, but is solely due to naturally occurring conditions, the exceedance shall not be considered a violation of standards (see A.A.C. R18-11-119). In the case of the Florida impaired water identification rule, EPA stated that "[o]nce the state's water quality standards provide for this determination, the date and information upon which the determination of a natural background condition is made must be documented in the record and readily available to the public and EPA. Without a provision addressing 'natu-

ral background' in the state's water quality standards, this provision is likely to be considered a revision to the state's water quality and as such will need EPA review and approval" (Resolution of Comments by the USEPA on the Florida Draft Rule, April 23, 2001).

Where monitoring and analysis has determined that pollutant loadings from naturally occurring conditions alone caused a violation of surface water quality standards, the issue should not be addressed through the TMDL process but rather through the adoption of appropriate site-specific standards. This approach is supported in EPA regulations under 40 CFR 131.10(g). In watersheds or waterbodies where there are or have been anthropogenic activities, assessments and TMDL analyses must determine the non-natural impacts to assess what "natural" really is or was. If it is clear that the natural background levels are above water quality standards, a site-specific standard will likely be needed before completion of the TMDL. Another commenter notes that page 90 of the National Research Council report "Assessing the TMDL Approach to Water Quality Management" stresses that water quality standards are the benchmark for establishing whether a waterbody is impaired. Both the TMDL process and the water quality assessment process require tremendous amounts of time and resources. Care must be taken to ensure that the standards are not flawed or the subsequent process is potentially a waste of time and resources. The Department believes that this interpretation is consistent with the water quality standards regulations approved by EPA and for how such regulations will be implemented in the 303(d) listing process. No change has been made to the rule.

Comment 7 - 31d: Delisting Provision & Natural Sources Exclusion: We respond to EPA's delisting concerns on pages 12-13 of our January 3, 2002 letter (Attachment 1). In addition, we should point out that EPA's suggestion that Arizona's delisting provisions are substantially different that the Florida delisting provisions does not appear accurate. Florida's approach is to place waters on the 1998 303(d) List that do not meet data sufficiency requirements on the Planning List for further collection of data to verify the water's impairment status. This approach is similar to ADEQ's proposed rule (see R18-11-604(D)(2)(b)).

With respect to the EPA concern that the language in R18-11-605(E)(1)(f) describes a new exclusion that is inconsistent with Arizona's water quality standards, we again re-emphasize that the rule is intended to define when waters should be listed as impaired and valuable TMDL resources expended on such waters. The rule is not intended to create new exclusions from Arizona's surface water quality standards. As noted above, violations of water quality standards can be separately enforced through NPDES permits (in certain situations) or through the enforcement provisions in Arizona's water quality standards. The issue of naturally-occurring conditions alone causing a violation of water quality standards should be addressed through the adoption of appropriate site-specific standards prior to listing or development of a TMDL, as discussed above. (EPA's water quality standards rules envision that such site-specific criteria should be adopted when waters cannot attain standards because of naturally occurring pollutant concentrations or legacy pollutants. See 40 C.F.R. § 131.10(g)). If this approach is not used, the TMDL process will never result in attainment of the water quality standard since the underlying standard is flawed. As noted above, the NRC report (page 90) stresses that because water quality standards are the benchmark for establishing whether a water body is impaired, care must be taken to ensure that the standards are not flawed or all subsequent steps in the TMDL process will be affected and ultimately result in the waste of time and resources.

Response: The Department appreciates the comment.

Comment 8 - 23: Subsection (E). This section does not clearly address what happens once a surface water, segment or pollutant is removed from the 303(d) List.

When this happens, does it go back to the planning list or is it removed from both? If it is removed from both can it ever be added to the planning or 303(d) List again? This should be stated in rule, not the preamble.

Why is there no section that addresses the removal of a surface water, segment or pollutant from the planning list?

Response: The Department agrees with the commenter. R18-11-604(A) has been revised as follows to clarify the paths for listing and delisting:

A. The Department shall evaluate, at least every five years, Arizona's surface waters by considering all readily available data ~~according to R18-11-605~~.

1. The Department shall place a surface water or segment ~~meeting the criteria for listing under R18-11-605 on either the~~ on:

a. The Planning List if it meets any of the criteria described in subsection (D), or

b. ~~the~~ The 303(d) List if it meets the criteria for listing as described in subsection (E).

2. ~~The Department shall not place a surface water or segment on the Planning List or the 303(d) List that does not meet the criteria for listing under R18-11-605(C) or (D), or meets the exception criteria in subsection (C).~~ The Department shall remove a surface water or segment from the Planning List, based on the requirements in R18-11-605(E)(1) or from the 303(d) List, based on the requirements in R18-11-605(E)(2).

3. The Department may move surface waters or segments between the Planning List and the 303(d) List based on the criteria established in R18-11-604 and R18-11-605.

Removing a surface water or segment from the Planning List was covered under R18-11-605(C)(4). Subsection (E) (proposed (C)(4)) has been revised as follows to include all "delisting" language:

E. Removing a surface water, segment, or pollutant from the Planning List or the 303(d) List. The Department shall:

1. Planning List. Remove a surface water, segment, or pollutant from the Planning List when:
   a. Monitoring activities indicate that:
      i. There is sufficient credible data to determine that the surface water or segment is impaired under subsection (D), in which case the Department shall place the surface water or segment on the 303(d) List. This includes surface waters with an EPA approved TMDL when the Department determines that the TMDL strategy is insufficient for the surface water or segment to attain water quality standards; or
      ii. There is sufficient credible data to determine that the surface water or segment is attaining all designated uses and standards.
   b. All pollutants for the surface water or segment are delisted.
2. 303(d) List.
   a. Remove a pollutant from a surface water or segment from the 303(d) List using one or more of the following criteria:
      i. The Department developed, and EPA approved, a TMDL for the pollutant;
      ii. The data used for previously listing the surface water or segment under R18-11-605(D) is superseded by more recent credible and scientifically defensible data meeting the requirements of R18-11-602, showing that the surface water or segment meets the applicable numeric or narrative surface water quality standard. When evaluating data to remove a pollutant from the 303(d) List, the monitoring entity shall collect the more recent data under similar hydrologic or climatic conditions as occurred when the samples were taken that indicated impairment, if those conditions still exist;
      iii. The surface water or segment no longer meets the criteria for impairment based on a change in the applicable surface water quality standard or a designated use approved by EPA under section 303(c)(1) of the Clean Water Act;
      iv. The surface water or segment no longer meets the criteria for impairment for the specific narrative water quality standard based on a change in narrative water quality standard implementation procedures;
      v. A re-evaluation of the data indicates that the surface water or segment does not meet the criteria for impairment because of a deficiency in the original analysis; or
      vi. Pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of applicable water quality standards;
   b. Remove a surface water, segment, or pollutant from the 303(d) List, by not using criteria more stringent than the listing criteria under subsection (D);
   c. Remove a surface water or segment from the 303(d) List if all pollutants for the surface water or segment are removed from the list;
   d. Remove a surface water, segment, or pollutant, from the 303(d) List and place it on the Planning List, if:
      i. The surface water, segment or pollutant was on the 1998 303(d) List and the dataset used in the original listing does not meet the credible data requirements under R18-11-602, or contains insufficient samples to meet the data requirements under subsection (D); or
      ii. The monitoring data indicates that the impairment is due to pollution, but not a pollutant.

The Department will remove a surface water, segment, or pollutant from the Planning List when there is sufficient credible data to make an evaluation that the surface water or segment is impaired and placed on the303(d) List, or if found to be attaining its uses will be removed from the Planning List. If there is insufficient data to make one of these determinations or if a surface water or segment is found to be not attaining as defined in the rulemaking, it will remain on the Planning List for further monitoring and investigation.

Once a surface water or segment meets one or more of the conditions outlined in subsection (E)(2) it is removed from the 303(d) List. Theoretically, once the TMDL restoration plan is implemented, the surface water will meet water quality standards and support its designated uses. Until such time, however, the surface water would be placed on the Planning List for further sampling to ensure the implementation plan is effective. This is consistent with EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* that would put this surface water on List 4a, impaired or threatened for one or more designated uses but a TMDL is not necessary because a TMDL has been completed (and is being or will be implemented).

A surface water can be relisted for the same or other pollutants based on credible and scientifically defensible data demonstrating impairment. A surface water may stay on the 303(d) List for some pollutants but be delisted for others. The Preamble has been modified to address these issues.

Comment 8 - 24: Subsection (E)(1)(g). In this case, when impairment is due to pollution rather than a pollutant, delisting can occur. Is this contradictory to R18-11-604(D)(2)(f) where something is placed on the planning list? If a planning list is there to develop future TMDLs via the 303(d) List, why would a surface water, segment or pollutant removed from the 303(d) List go back to the planning list? This needs further clarification in the rule.

Response: The Department appreciates the commenter pointing out the conflict. Based on EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance*, surface waters or segments found to be impaired by pollution rather than a pollutant shall not be placed on the 303(d) List but rather shall be placed on the Planning List. This delisting criteria was moved from 605(E)(1)(g) to 605(E)(2)(d)(ii) (see rule language in comment 8 - 23 above) to accurately reflect this requirement.

Comment 5 - 21: We think delisting ought to occur because the waters meet the water quality standards. Period.

Response: In addition to waters found to be meeting water quality standards there are other provisions in state law and federal guidance that require delisting. Subsection (E) provides for a number of these instances, including where surface waters are either found to be meeting standards due to moderating provisions in the water quality standards, such as naturally occurring conditions, or a change in water quality standard now means that the surface water is no longer exceeding standards. A.R.S. § 49-232(H) prohibits the listing of any surface water that does not meet the credible data requirements of this rulemaking. This will result in a number of waters that were listed on the 1998 List to be removed and placed on the Planning List for further data collection. EPA's *2002 Integrated Water Quality Monitoring and Assessment Report Guidance* encourages states to "true" up their 2002 Lists and move some impaired waters off the 303(d) List for reasons defined in the rule as not attaining, which includes a TMDL has been prepared and is being or is about to be implemented; technology-based effluent limitations or pollution control activities are planned or underway so that the surface water is expected to meet standards by the next listing cycle, subject to the requirements and documentation of R18-11-604(D)(2)(h); impairment is due to pollution rather than a pollutant; or impairment is due to solely naturally occurring conditions.

R18-11-606. TMDL Priority Criteria for 303(d) Listed Surface Waters or Segments

Comment 5 - 14: We have some concerns about how the ADEQ will prioritize the total maximum daily loads (TMDLs) per this section. Under subsection (A)(3) which states which additional factors the Department will consider in prioritizing impaired waters for development of TMDLs, we do not think the agency should limit this prioritization to only the presence in a surface water or segment of species listed as threatened or endangered under section 4 of the Endangered Species Act, but should also include other sensitive species identified by the Arizona Game and Fish Department. We also think this section should not just be limited to the "presence" of the species, but it should be expanded to those species that are dependent on the surface water.

Comment 5 - 17: Under subsection (B)(1)(d), this should be expanded beyond threatened and endangered species and should include sensitive species or species of special concern as identified by the Arizona Game and Fish Department.

Response: The Department believes this rulemaking is adequately protective of threatened and endangered (T&E) species. Subsection (A) lists additional factors that the Department will consider when prioritizing a listed water for development of a TMDL, while subsection (B)(1) actually specifies conditions that will warrant a "high priority" ranking. The Department will give an impaired surface water a high priority ranking if the area in which the surface water is located is found to be suitable habitat for one or more T&E species. The U.S. Fish and Wildlife Service doesn't provide specific information on locations of T&E species. The lists are generally those species found within a county. The information on T&E species from the Arizona Game and Fish Department is usually more localized. If the area containing the impaired water is identified as suitable habitat for a listed specie, then each pollutant of concern must be examined to determine what level of threat, if any, it poses to that species. If it is determined that any of the listed pollutants would jeopardize the listed species, the Department would assign that watercourse a high priority to complete the necessary TMDL study.

The Department disagrees with the suggestion to include other state sensitive species in the prioritization. The Endangered Species Act has a formal nomination process that undergoes extensive public review and comment. No change has been made to the rule.

Comment 7 - 26: Subsection (B). If other mechanisms are in place to ensure that water quality standards are going to be met in an impaired water (e.g., WQARF cleanups, CWA consent decrees), then a low priority should be assigned because the water may end up meeting standards without the state having to go through the effort and expense of developing a TMDL (additional data collection, public notice and response to comments, etc.). Assigning such waters a low priority would be consistent with A.R.S. § 49-233(C)(14). An example of this situation would be lower Mineral Creek, where a consent decree between Asarco, the state of Arizona, and the United States requires that standards be met by a date certain.

In some cases, waters in this category should be included only on the Planning List, since they may be expected to meet standards by the time of the next listing cycle. See proposed R18-11-604(D)(2)(h).[35] However, if attainment is not expected until after the next listing cycle, the water may need to stay on the 303(d) List. In such cases, the water should be assigned a low priority.

Response: The Department agrees with the commenter.

Comment 5 - 15: Under subsection (B)(1)(a)(ii), we think the sentence should be amended to say "The type and extent of risk from the impairment to human health, aquatic life, OR WILDLIFE."

Response: The Department thanks the commenter pointing out this omission. The intent of the criteria is to protect human health, aquatic life, and wildlife. This language is consistent with other criteria in the rule. (See subsection (B)(3)(d)). There is also a typographical error in the statement that has been corrected. Subsection (B)(1)(a)(ii) has been revised as follows:

The type and ~~extend~~ extent of risk from the impairment to human health, ~~or~~ aquatic life, or wildlife.

Comment 5 - 16: Under subsection (B)(1)(c), we ask that you amend this to say "... or other federal OR STATE special protection of the water resource." This allows for prioritizing waters that the state might identify for special consideration.

Response: The Department agrees and subsection (B)(1)(c) has been revised as follows to clarify that all special protection water resources will be prioritized:

The listed surface water or segment is listed as a unique water in R18-11-112 or is part of an area classified as "wilderness area," wild and scenic rivers," or other federal or state special protection of the water resource;

Comment 5 - 18: We ask that you remove subsection (B)(1)(f). What is sufficient public interest and support for the development of a TMDL? If there is opposition to developing a TMDL for a stream impaired by mining operations, and the mining town opposes that, does the agency then drop that to the bottom of the list? What if the impairment represents significant ecological risk or significant risk to human health? This section is unnecessary and unwarranted.

Response: The Department disagrees that the criteria is unnecessary and unwarranted. One of the keys to a successful TMDL is support from the affected interests. It is often these entities or individuals who, once the TMDL is completed, will implement the water quality restoration strategies. If two impaired streams had equal rankings but one stream was generating a significant amount of attention from local citizens or other parties, the Department could choose to initiate that study first to take advantage of the local knowledge and interest. There is nothing in the language to suggest the converse -- that a controversial TMDL would rate a lower priority. No change has been made to the rule.

Comment 7 - 24: Subsection (B)(1)(h). ADEQ proposes to list a water as high priority if a pollutant in that water is listed for eight years or more. This provision should be clarified to state that the eight year clock covers only periods where credible data as defined under this rule is available (i.e., previous periods of listing based on non-credible data should not be counted).

Response: The Department do not think the clarification to subsection (B)(1)(h) is necessary. A.R.S. § 49-232(H) is clear that no waters be listed on future 303(d) Lists that do not meet the credible data requirements of this rule. Therefore the eight year clock essentially begins with the 2002 303(d) List. No change has been made to the rule.

Comment 7 - 8: Subsection (B)(3)(d). We support the assignment of low priority for developing TMDLs for ephemeral streams in most cases, unless certain showings are made (proposed R18-11-606(B)(3)(d)). ADEQ's limited resources are better spent on addressing impairment in non-ephemeral waters, which will typically be of higher value than ephemeral waters and where more data typically will be available.

Assigning a low priority to ephemeral streams in most cases also reflects the real world problems ADEQ is having with gathering adequate data to develop TMDLs for ephemeral streams (e.g., the draft Sonoita Basin TMDLs, which concede that minimal data is available and that the state is having to rely heavily on modeling).

We also supports the elimination of separate (less stringent) sampling requirements for listing ephemeral streams as impaired. Nothing in the Arizona TMDL statute supported requiring fewer samples (or fewer sampling events) for ephemeral streams as compared to non-ephemeral streams.

For many of these same reasons, we still support development of technical guidance for assessing impairment for ephemeral streams (appropriate models, selection of critical condition, etc.)

Response: The Department appreciates the comments. As for the technical guidance on ephemeral streams, this rulemaking provides what guidance there is available at this time. The Department supports the creation of further guidance but believes, after conferring with other states, that many states are struggling with the same issues as Arizona and development of clear guidance will most likely be an evolving process.

Comment 7 - 25: Subsection (B)(3)(d). For the reasons noted above, we support classifying ephemeral streams as low priority in most cases. We suggest that such waters be reprioritized only if they are "significantly" contributing to impairment of a downstream perennial water (the word "significantly" should be added to this provision). A very minor contribution (e.g., minor loading from an ephemeral tributary during storm events) should not automatically result in re-prioritization. This is especially (but not exclusively) true if the downstream perennial water is itself a low priority water.

Response: The Department disagrees that the word "significantly" should be added to subsection (B)(3)(d). This rulemaking establishes scientifically based criteria by which to determine impairment. By adding the word "significantly," the Department will be required to interpret or quantify the impact before doing any analysis. If water quality monitoring demonstrates that loading from an ephemeral stream is causing impairment, as defined in the rule, in a downstream perennial waterbody, then the pollutant is likely posing a threat to human health, aquatic life, or wildlife and warrants a higher priority.

Comment 10 - 5: In addition to our support of the rules proposal to move currently (1998) 303(d) listed water segments to the planning list if those water segments do not meet the credible data and sampling requirements that the rule requires for full 303(d) listing, we also support the rules proposal to make delisting procedures comparable to listing procedures.

This approach is consistent with NRC's recommendation that currently listed water segments with inadequate data should be moved to the preliminary list. We believe this will allow Arizona to focus its resources on bringing priority waters back into compliance with water quality standards.

Response: The Department appreciates the comment.

Comment 5 - 19: We agree that the key factor in prioritizing the development of a TMDL is the threat to the health and safety of humans, aquatic life or wildlife and the overall ecological impact of the impairment and that streams with low ecological and human health risk should be a lower priority.

Response: The Department appreciates the comment.

Comment 5 - 20: Under subsection (D)(5), it indicates that the Department can shift priorities if there is a reduction or increase in staff or budget involved in the TMDL development. Because the resources are nearly always limited, we are concerned that important water bodies will become lower priorities because of lack of funding and staff. Doesn't this give the agency an easy out?

Response: The Department's goal is to restore and maintain the water quality of all Arizona's surface waters. Therefore, the Department must make the best use of all of its resources (including budgets and personnel) given the uncertainties in conducting environmental research, such as drought, floods, staffing shortages, and budget shortfalls. The Department has committed to maintaining a monthly status page of TMDLs progress on the ADEQ web site http://www.adeq.state.az.us/environ/water/assess/tmdl.html so that the public is aware of ongoing projects and where we are in the process.

Comment 7 - 27: Subsection (E). The proposal allows ADEQ to complete TMDLs already begun but not finished for waters that were previously listed but that do not qualify for listing under the new rule. See proposed R18-11-606(E). We question whether ADEQ should, or has the legal authority under the state TMDL statute to, expend resources on completing TMDLs for waters that do not qualify as impaired under the new rule. This approach is inconsistent with A.R.S. § 49-232(H), which calls for ADEQ to remove waters from the list if they do not meet the criteria of the new rule. (We understand that completing a TMDL is one way to delist a water, but think it is clear that the intent of A.R.S. 49-232(H) is not that ADEQ would expend time and money completing TMDLs for waters not qualifying as impaired under the new rule.)

Response: This subsection salvages ongoing TMDL projects, based on the 1998 List, for which the Department has invested significant time and resources. Because a waterbody is removed from the 1998 List, due to the lack of credible data, doesn't mean that the waterbody is not impaired. If the ongoing investigation indicates that the waterbody is not impaired, the TMDL study would stop and a delist report written. If, however, the ongoing sampling indicates a clear pattern, but a sufficient number of samples have yet to be collected, the Department should be allowed to finish the needed data collection phase to determine the next course of action.

Footnotes

[1] see R18-11-602(A)(1)(c) and R18-11-602(A)(2)(a)(iv)

[2] see R18-11-602(A)(1) and R18-11-602(A)(2)(a)

[3] EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations, EPA QA/R-5, November, 1999 (interim final) was superseded by EPA/240/B-01/003 in March, 2001.

[4] R18-11-602

[5] R18-11-603

[6] see 66 Fed. Reg. 125 @ 34489 (June 28, 2001)

[7] *See generally,* Malumphy v. MacDougall, 125 Ariz. 483, 610 P.2d 1044 (1980) (*Regulations of the Dep't. of Corrections dealing with classifications affecting various levels of custody of prisoners materially affected the type of existence a sentenced prisoner would endure and therefore was not an internal matter. The regulations set forth the procedures and policy of the agency. Regulations which materially affect the existence of a sentenced prisoner are important interests which must be filed with the Secretary of State.).*

[8] *See*, A.R.S. § 49-221 (A): ("The director shall adopt, by rule, water quality standards...."). *And see*, A.R.S. § 49-221 (D): ("Water quality standards shall be expressed in terms of the uses to be protected... in addition to any narrative standards which the director may deem appropriate.").

[9] *See*, A.R.S. § 41-2001(17)(*emphasis added*): ("**'Rule' means an agency statement of general applicability that implements**, interprets or prescribes law or policy, or describes the **procedure or practice requirements of an agency**. Rule includes prescribing fees or the amendment or repeal of a prior rule but does not include intraagency memoranda that are not delegation agreements.").

[10] *See*, A.R.S. § 41-1001(17)(*emphasis added*): ("'**Rule' means an agency statement of general applicability that implements**, interprets or prescribes law or policy, or describes the **procedure or practice requirements of an agency**. Rule includes prescribing fees or the amendment or repeal of a prior rule but does not include interagency memoranda that are not delegation agreements.").

[11] *See*, A.R.S. § 49-232(F).

[12] *See*, A.R.S. § 41-1001(17).

[13] *See*, Daou v. Harris, 139 Ariz. 353,357 678 P.2d 934, 398 (1984).

[14] *See*, "An Administrative Procedures Act for Arizona," 2 Ariz.L.Rev. 17, 23-24(1960).

[15] To constitute a "rule," "general applicability" does not require uniform application. Rather, the emphasis is on regular and routine application of an agency policy. *See*, Havasu Heights v. The State Land Department of Arizona,158 Ariz. 552,560 764 P.2d 37,45 (App. 1988) (*Court reasoned that because there were over 130 lease in existence which were executed pursuant to the program outlined in an internal memo and these policies were regularly and routinely applied, the agency had met the general criteria of 'general applicability' and the program constitute a rule under A.R.S. § 41-1001(17).*).

[16] "To ensure fair and open regulation by state agencies, a person:... May allege that an existing agency practice or substantive policy statement constitutes a rule and have that agency practice or substantive policy statement declared

void because the practice or substantive policy statement constitutes a rule as provided in § 41-1033." *See*, A.R.S. § 41-1001.01(9).

[17] *See*, A.R.S. § 41-1001.01 (A) (9): ("To ensure fair and open regulation by state agencies, a person:... May allege that an existing agency practice or substantive policy statement constitutes a rule and have that agency practice or substantive policy statement declared void because of the practice or substantive policy statement constitutes a rule as provided in § 41-1033.").

[18] *See*, proposed rule, R18-11-605(D)(3)(b). Evaluating a Surface Water or Segment for Listing or Delisting; 303(d) List; p. 556: "The appropriate criteria for issuance of a fish consumption advisory are specified in the "*Narrative Toxicity Standard 303(d) Implementation Procedures*," January 2002, published by the Arizona Department of Environmental Quality, 3033 North Central Avenue, Phoenix, Arizona."

[19] *Note*: Copies or a link to the Narrative Guidelines were requested from the ADEQ Librarian on February 26, 2002. On February 28, 2002, the Department Librarian responded that the Narrative Guidelines were still in draft form and had to be reviewed by Linda Taunt before they could be sent out sometime during the week of March 3-9, 2002.

[20] *See*, proposed rule, R18-11-605(D)(3).

[21] *See*, A.R.S. § 49-232(B).

[22] *See*, A.R.S. § 49-232(B)(4).

[23] *See*, A.R.S. § 49-232(F).

[24] *See*, A.R.S. § 41-1001.01(A)(5); ("To ensure fair and open regulation by state agencies, a person:.... May review the full text or summary of all rulemaking activity, the summary of all substantive policy statements and the full text of executive orders in the register as provided in Article 2 of this chapter.").

[25] Under § 130.7(b)(6), when reviewing a state's impaired waters list, EPA can request an explanation for a state's decision not to use certain data.

[26] *Methodology for Waterbody Assessment and Developing the 2002 Section 303(d) List of Impaired Waterbodies for Nebraska* (December 2001).

[27] *North Carolina's 2000 § 303(d) List*.

[28] Data collected before the effective date of the rule is exempt from the quality assurance requirements of the proposal under R18-11-602(A)(4)(a), as long as ADEQ determines the data is reliable.

[29] Included as ***Attachment 7***.

[30] The exceptions are unique or effluent-dependent waters for which some site-specific criteria have been adopted pursuant to R18-11-112 and R18-11-113.

[31] "The question arises as to whether States and Tribes have the flexibility to exclude a water body from 305(b) reports and 303(d), i.e., conclude that the designated use was protected, even in the face of data indicating one or more excursions of the applicable chemical-specific water quality criteria. EPA would like to consider possible mechanisms under the existing CWA and the legal theories supporting them to address these questions." 63 Fed. Reg. at 36797.

[32] See 8 A.A.R. 537 ("A surface water is not, by default, impaired because one dataset indicates possible impairment, while another dataset shows it attaining its uses.")

[33] See Attachment 7, pp. 20-25.

[34] See Attachment 5, pp. 11-12.

[35] Under current EPA regulations, such waters probably would not need to be listed because, under 40 C.F.R. § 130.7(b)(1)(iii), "other pollution control requirements" are sufficient to meet standards.

[36] *See*, R18-11-602(A)(1) and (2). *And see*, R18-11-602(B)(1).

[37] *See*, R18-11-602(A); *and see*, R18-11-602(A)(2)(b).

[38] *See*, R18-11-602(B).

[39] *See*, R18-11-602(A)(1) and R18-11-602(A)(2)(a).

[40] *See*, Arizona Administrative Register, Volume 8, Issue # 6, February 8, 2002; Proposed Rule, Affecting Section R18-11-601 through R18-11-606 (hereinafter: proposed rule), preamble, p. 537.

[41] *Id.*

[42] *Id.*

[43] "The Department may consider a single line of water quality evidence when the evidence is sufficient to demonstrate that the surface water or segment is impaired or not attaining." *See*, R18-11-605(B)(3).

[44] *See*, proposed rule, preamble, pp. 537-538; ("The weight-of-evidence approach does not, however, preclude the Department from making a determination of impairment based upon a single line of evidence, if the data provides clear and convincing evidence of impairment due to non-attainment.").

[45] *Id.*

[46] *See*, A.R.S. § 49-232(B) and (C).

[47] *See generally,* Matter of Appeal in Maricopa County Juvenile Action No. JS-5209 and No. JS-4963, 143 Ariz. 178, 692 P.2d 1027 (App. 1984) (*A statute is unconstitutionally vague if it fails to give a person of ordinary intelligence a reasonable opportunity to know what is prohibited so that he may act accordingly. Or, if it allows for arbitrary and discriminatory enforcement by failing to provide an objective standard for those who are charged with enforcing or applying the law.*). *Also see generally,* State v. Johnson, 112 Ariz. 383, 542 P.2d 808 (1975) (*A constitutional inquiry into the overbreadth of a statute is not concerned with its lack of clarity or precision, rather, the proper inquiry is whether the statute offends the constitutional principle that a governmental purpose to control or prevent activities that are constitutionally subject to state regulation, may not be achieved by means which are unnecessarily broad and thereby invade the areas of protected freedoms*.).

[48] *See*, proposed rule, R18-11-605(B)(2)(e)(i).

[49] *See generally,* Matter of Appeal in Maricopa County Juvenile Action No. JS-5209 and No. JS-4963, 143 Ariz. 178, 692 P.2d 1027 (App. 1984)

[50] *See*, A.R.S. § 49-232(E).

[51] *Id.*

[52] *See*, proposed rule, preamble at p. 538.

[53] *See*, proposed rule R18-11-605(D)(1).

[54] *See*, proposed rule, R18-11-605(D)(3)(b). Evaluating a Surface Water or Segment for Listing or Delisting; 303(d) List; p. 556: "The appropriate criteria for issuance of a fish consumption advisory are specified in the "*Narrative Toxicity Standard 303(d) Implementation Procedures*," January 2002, published by the Arizona Department of Environmental Quality, 3033 North Central Avenue, Phoenix, Arizona."

[55] *Note*: Electronic copies of the *Narrative Toxicity Standard Implementation Procedures for Arizona*, DRAFT, February 1, 2002, were made available to interested stakeholders on March 8, 2002; 4:08 p.m.

[56] *Id.*

[57] *See*, proposed rule, preamble at p. 538.

[58] *See*, proposed rule, R18-11-605(D)(3).

[59] *See*, A.R.S. § 49-232(B).

[60] *See*, A.R.S. § 49-232(B)(4).

[61] *See*, A.R.S. § 49-232(F).

[62] *See*, A.R.S. § 41-1001.01(A)(5); ("To ensure fair and open regulation by state agencies, a person:.... May review the full text or summary of all rulemaking activity, the summary of all substantive policy statements and the full text of executive orders in the register as provided in Article 2 of this chapter.").

[63] *See*, Ruiz v. Hull, 191 Ariz. 441, 957 P.2d 984, cert.den. 119 S.C. 850, 525 U.S. 1093; ((A *statute is vague if it fails to give fair notice of what it prohibits*.); State ex rel. Purcell v. Superior Court, 111 Ariz. 582, 584, 535 P.2d 1299, 1301 (1975)); *see also* Connally v. General Constr. Co., 269 U.S. 385, 391, 46 S. Ct. 126, 127, 70 L. Ed. 322 (1926) (*Vagueness is concerned with clarity of law; a law is void on its face, and thereby violates due process, if it is so vague that persons "of common intelligence must necessarily guess at its meaning and differ as to its application.*").

[64] *See*, A.R.S. § 41-1001(17)(*emphasis added*): ("'Rule' means an agency statement of general applicability that implements, interprets or prescribes law or policy, or describes the procedure or practice requirements of an agency.

Rule includes prescribing fees or the amendment or repeal of a prior rule but does not include interagency memoranda that are not delegation agreements.").

[65] *See*, A.R.S. § 49-232(F).

[66] *See*, A.R.S. § 41-1001(17).

[67] *See*, Daou v. Harris, 139 Ariz. 353, 357 678 P.2d 934, 398 (1984).

[68] *See*, "An Administrative Procedures Act for Arizona," 2 Ariz.L.Rev. 17, 23-24(1960).

[69] To constitute a "rule," "general applicability" does not require uniform application. Rather, the emphasis is on regular and routine application of an agency policy. *See*, Havasu Heights v. The State Land Department of Arizona, 158 Ariz. 552,560 764 P.2d 37,45 (App. 1988) (*Court reasoned that because there were over 130 lease in existence which were executed pursuant to the program outlined in an internal memo and these policies were regularly and routinely applied, the agency had met the general criteria of 'general applicability' and the program constitute a rule under A.R.S. § 41-1001(17).*).

[70] To ensure fair and open regulation by state agencies, a person:... May allege that an existing agency practice or substantive policy statement constitutes a rule and have that agency practice or substantive policy statement declared void because the practice or substantive policy statement constitutes a rule as provided in § 41-1033." *See*, A.R.S. § 41-1001.01(9).

Commenter 7 Attachments

1 – AMA letter to ADEQ dated January 3, 2002

2 - *Public Comment on the 2002 "Draft Guidance for Assessing Texas Surface and Finished Drinking Water Quality Data" and "Draft Methodology for Developing the Texas List of Impaired Water Bodies"* (August 21, 2001)

3 - *Methodology for Developing the Texas List of Impaired Water Bodies"* (August 1, 2001)

4 - *Unified Assessment Methodology, Colorado Water Quality Control Division* (November 2001 draft)

5 - *Methodology for Waterbody Assessment and Developing the 2002 Section 303(d) List of Impaired Waterbodies for Nebraska* (December 2001)

6 - *North Carolina's 2000 § 303(d) List*

7 - *Guidance for Assessing Texas Surface and Finished Drinking Water Quality Data, 2002* (October 2001)

8 – Appendix E to *The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit From a Dissolved Criterion* (EPA 823-B-96-007) (June 1996)

9 – Federal Water Quality Coalition & AMSA, *Preparation of Integrated Water Quality Monitoring and Assessment Reports: Recommendations for Clean Water Act § 303(d) and § 305(b) Methodologies and Reporting* (March 2002)

10 - Order in Monongahela Power Co. et al. v. Department of Environmental Protection, Kanawha County Circuit Court, (Civ. No. 99-AA-66) (W. Va., April 30, 2001)

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules:

None

13. Incorporations by reference and their location in the rules:

None

14. Was this rule previously adopted as an emergency rule:

No

15. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 11. DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY STANDARDS

ARTICLE 6. IMPAIRED WATER IDENTIFICATION

Section

ARTICLE 6. IMPAIRED WATER IDENTIFICATION

R18-11-601. Definitions

In addition to the definitions established in A.R.S. §§ 49-201 and 49-231, and A.A.C. R18-11-101, the following terms apply to this Article:

1. "303(d) List" means the list of surface waters or segments required under section 303(d) of the Clean Water Act and A.R.S. Title 49, Chapter 2, Article 2.1, for which TMDLs are developed and submitted to EPA for approval.
2. "Attaining" means there is sufficient, credible, and scientifically defensible data to assess a surface water or segment and the surface water or segment does not meet the definition of impaired or not attaining.
3. "AZPDES" means the Arizona Pollutant Elimination Discharge System.
4. "Credible and scientifically defensible data" means data submitted, collected, or analyzed using:
   a. Quality assurance and quality control procedures under A.A.C. R18-11-602;
   b. Samples or analyses representative of water quality conditions at the time the data were collected;
   c. Data consisting of an adequate number of samples based on the nature of the water in question and the parameters being analyzed; and
   d. Methods of sampling and analysis, including analytical, statistical, and modeling methods that are generally accepted and validated by the scientific community as appropriate for use in assessing the condition of the water.
5. "Designated use" means those uses specified in 18 A.A.C. 11, Article 1 for each surface water or segment whether or not they are attaining.
6. "EPA" means the U.S. Environmental Protection Agency.
7. "Impaired water" means a Navigable water for which credible scientific data exists that satisfies the requirements of A.R.S. § 49-232 and that demonstrates that the water should be identified pursuant to 33 United States Code § 1313(d) and the regulations implementing that statute. A.R.S. § 49-231(1).
8. "Laboratory detection limit" means a "Method Reporting Limit" (MRL) or "Reporting Limit" (RL). These analogous terms describe the laboratory reported value, which is the lowest concentration level included on the calibration curve from the analysis of a pollutant that can be quantified in terms of precision and accuracy.
9. "Monitoring entity" means the Department or any person who collects physical, chemical, or biological data used for an impaired water identification or a TMDL decision.
10. "Naturally occurring condition" means the condition of a surface water or segment that would have occurred in the absence of pollutant loadings as a result of human activity.
11. "Not attaining" means a surface water is assessed as impaired, but is not placed on the 303(d) List because:
    a. A TMDL is prepared and implemented for the surface water;
    b. An action, which meets the requirements of R18-11-604(D)(2)(h), is occurring and is expected to bring the surface water to attaining before the next 303(d) List submission; or
    c. The impairment of the surface water is due to pollution but not a pollutant, for which a TMDL load allocation cannot be developed.
12. "NPDES" means National Pollutant Discharge Elimination System.
13. "Planning List" means a list of surface waters and segments that the Department will review and evaluate to determine if the surface water or segment is impaired and whether a TMDL is necessary.
14. "Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. 33 U.S.C. 1362(6). Characteristics of water, such as dissolved oxygen, pH, temperature, turbidity, and suspended sediment are considered pollutants if they result or may result in the non-attainment of a water quality standard.
15. "Pollution" means "the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water. 33 U.S.C. 1362(19).

16. "QAP" means a quality assurance plan detailing how environmental data operations are planned, implemented, and assessed for quality during the duration of a project.
17. "Sampling event" means one or more samples taken under consistent conditions on one or more days at a distinct station or location.
18. "SAP" means a site specific sampling and analysis plan that describes the specifics of sample collection to ensure that data quality objectives are met and that samples collected and analyzed are representative of surface water conditions at the time of sampling.
19. "Spatially independent sample" means a sample that is collected at a distinct station or location. The sample is independent if the sample was collected:
    a. More than 200 meters apart from other samples, or
    b. Less than 200 meters apart, and collected to characterize the effect of an intervening tributary, outfall or other pollution source, or significant hydrographic or hydrologic change.
20. "Temporally independent sample" means a sample that is collected at the same station or location more than seven days apart from other samples.
21. "Threatened" means that a surface water or segment is currently attaining its designated use, however, trend analysis, based on credible and scientifically defensible data, indicates that the surface water or segment is likely to be impaired before the next listing cycle.
22. "TMDL" means total maximum daily load.
23. "TMDL decision" means a decision by the Department to:
    a. Prioritize an impaired water for TMDL development,
    b. Develop a TMDL for an impaired water, or
    c. Develop a TMDL implementation plan.
24. "Total maximum daily load" means an estimation of the total amount of a pollutant from all sources that may be added to a water while still allowing the water to achieve and maintain applicable surface water quality standards. Each total maximum daily load shall include allocations for sources that contribute the pollutant to the water, as required by section 303(d) of the clean water act (33 United States Code section 1313(d)) and regulations implementing that statute to achieve applicable surface water quality standards. A.R.S. § 49-231(4).
25. "Water quality standard" means a standard composed of designated uses (classification of waters), the numerical and narrative criteria applied to the specific water uses or classification, the antidegradation policy, and moderating provisions, for example, mixing zones, site-specific alternative criteria, and exemptions, in A.A.C. Title 18, Chapter 11, Article 1.
26. "WQARF" means the water quality assurance revolving fund established under A.R.S. § 49-282.

R18-11-602. Credible Data

A. Data are credible and relevant to an impaired water identification or a TMDL decision when:

1. Quality Assurance Plan. A monitoring entity, which contribute data for an impaired water identification or a TMDL decision, provides the Department with a QAP that contains, at a minimum, the elements listed in subsections (A)(1)(a) through (A)(1)(f). The Department may accept a QAP containing less than the required elements if the Department determines that an element is not relevant to the sampling activity and that its omission will not impact the quality of the results based upon the type of pollutants to be sampled, the type of surface water, and the purpose of the sampling.
    a. An approval page that includes the date of approval and the signatures of the approving officials, including the project manager and project quality assurance manager;
    b. A project organization outline that identifies all key personnel, organizations, and laboratories involved in monitoring, including the specific roles and responsibilities of key personnel in carrying out the procedures identified in the QAP and SAP, if applicable;
    c. Sampling design and monitoring data quality objectives or a SAP that meets the requirements of subsection (A)(2) to ensure that:
        i. Samples are spatially and temporally representative of the surface water,
        ii. Samples are representative of water quality conditions at the time of sampling, and
        iii. The monitoring is reproducible;
    d. The following field sampling information to assure that samples meet data quality objectives:
        i. Sampling and field protocols for each parameter or parametric group, including the sampling methods, equipment and containers, sample preservation, holding times, and any analysis proposed for completion in the field or outside of a laboratory;
        ii. Field and laboratory methods approved under subsection (A)(5);
        iii. Handling procedures to identify samples and custody protocols used when samples are brought from the field to the laboratory for analysis;

iv. Quality control protocols that describe the number and type of field quality control samples for the project that includes, if appropriate for the type of sampling being conducted, field blanks, travel blanks, equipment blanks, method blanks, split samples, and duplicate samples;
v. Procedures for testing, inspecting, and maintaining field equipment;
vi. Field instrument calibration procedures that describe how and when field sampling and analytical instruments will be calibrated;
vii. Field notes and records that describe the conditions that require documentation in the field, such as weather, stream flow, transect information, distance from water edge, water and sample depth, equipment calibration measurements, field observations of watershed activities, and bank conditions. Indicate the procedures implemented for maintaining field notes and records and the process used for attaching pertinent information to monitoring results to assist in data interpretation;
viii. Minimum training and any specialized training necessary to do the monitoring, that includes the proper use and calibration of field equipment used to collect data, sampling protocols, quality assurance/quality control procedures, and how training will be achieved;

e. Laboratory analysis methods and quality assurance/quality control procedures that assure that samples meet data quality objectives, including:
i. Analytical methods and equipment necessary for analysis of each parameter, including identification of approved laboratory methods described in subsection (A)(5), and laboratory detection limits for each parameter;
ii. The name of the designated laboratory, its license number, if licensed by the Arizona Department of Health Services, and the name of a laboratory contact person to assist the Department with quality assurance questions;
iii. Quality controls that describe the number and type of laboratory quality control samples for the project, including, if appropriate for the type of sampling being conducted, field blanks, travel blanks, equipment blanks, method blanks, split samples, and duplicate samples;
iv. Procedures for testing, inspecting, and maintaining laboratory equipment and facilities;
v. A schedule for calibrating laboratory instruments, a description of calibration methods, and a description of how calibration records are maintained; and
vi. Sample equipment decontamination procedures that outline specific methods for sample collection and preparation of equipment, identify the frequency of decontamination, and describe the procedures used to verify decontamination;

f. Data review, management, and use that includes the following:
i. A description of the data handling process from field to laboratory, from laboratory to data review and validation, and from validation to data storage and use. Include the role and responsibility of each person for each step of the process, type of database or other storage used, and how laboratory and field data qualifiers are related to the laboratory result;
ii. Reports that describe the intended frequency, content, and distribution of final analysis reports and project status reports;
iii. Data review, validation, and verification that describes the procedure used to validate and verify data, the procedures used if errors are detected, and how data are accepted, rejected, or qualified; and
iv. Reconciliation with data quality objectives that describes the process used to determine whether the data collected meets the project objectives, which may include discarding data, setting limits on data use, or revising data quality objectives.

2. Sampling and analysis plan.
a. A monitoring entity shall develop a SAP that contains, at a minimum, the following elements:
i. The experimental design of the project, the project goals and objectives, and evaluation criteria for data results;
ii. The background or historical perspective of the project;
iii. Identification of target conditions, including a discussion of whether any weather, seasonal variations, stream flow, lake level, or site access may affect the project and the consideration of these factors;
iv. The data quality objectives for measurement of data that describe in quantitative and qualitative terms how the data meet the project objectives of precision, accuracy, completeness, comparability, and representativeness;
v. The types of samples scheduled for collection;
vi. The sampling frequency;
vii. The sampling periods;
viii. The sampling locations and rationale for the site selection, how site locations are benchmarked, including scaled maps indicating approximate location of sites; and

ix. A list of the field equipment, including tolerance range and any other manufacturer's specifications relating to accuracy and precision.

b. The Department may accept a SAP containing less than the required elements if the Department determines that an element is not relevant to the sampling activity and that its omission will not impact the quality of the results based upon the type of pollutants to be samples, the type of surface water, and the purpose of the sampling.

3. The monitoring entity may include any of the following in the QAP or SAP:
   a. The name, title, and role of each person and organization involved in the project, identifying specific roles and responsibilities for carrying out the procedures identified in the QAP and SAP;
   b. A distribution list of each individual and organization receiving a copy of the approved QAP and SAP;
   c. A table of contents;
   d. A health and safety plan;
   e. The inspection and acceptance requirements for supplies;
   f. The data acquisition that describes types of data not obtained through this monitoring activity, but used in the project;
   g. The audits and response actions that describe how field, laboratory, and data management activities and sampling personnel are evaluated to ensure data quality, including a description of how the project will correct any problems identified during these assessments; and
   h. The waste disposal methods that identify wastes generated in sampling and methods for disposal of those wastes.
4. Exceptions. The Department may determine that the following data are also credible and relevant to an impaired water identification or TMDL decision when data were collected, provided the conditions in subsections (A)(5), (A)(6), and (B) are met, and where the data were collected in the surface water or segment being evaluated for impairment:
   a. The data were collected before July 12, 2002 and the Department determines that the data yield results of comparable reliability to the data collected under subsections (A)(1) and (A)(2);
   b. The data were collected after July 12, 2002 as part of an ongoing monitoring effort by a governmental agency and the Department determines that the data yield results of comparable reliability to the data collected under subsections (A)(1) and (A)(2); or
   c. The instream water quality data were or are collected under the terms of a NPDES or AZPDES permit or a compliance order issued by the Department or EPA, a consent decree signed by the Department or EPA, or a sampling program approved by the Department or EPA under WQARF or CERCLA, and the Department determines that the data yield results of comparable reliability to data collected under subsections (A)(1) and (A)(2).
5. Data collection, preservation, and analytical procedures. The monitoring entity shall collect, preserve, and analyze data using methods of sample collection, preservation, and analysis established under A.A.C. R9-14-610.
6. Laboratory. The monitoring entity shall ensure that chemical and toxicological samples are analyzed in a state-licensed laboratory, a laboratory exempted by the Arizona Department of Health Services for specific analyses, or a federal or academic laboratory that can demonstrate proper quality assurance/quality control procedures substantially equal to those required by the Arizona Department of Health Services, and shall ensure that the laboratory uses approved methods identified in A.A.C. R9-14-610.

B. Documentation for data submission. The monitoring entity shall provide the Department with the following information either before or with data submission:
1. A copy of the QAP or SAP, or both, revisions to a previously submitted QAP or SAP, and any other information necessary for the Department to evaluate the data under subsection (A)(4);
2. The applicable dates of the QAP and SAP, including any revisions;
3. Written assurance that the methods and procedures specified in the QAP and SAP were followed;
4. The name of the laboratory used for sample analyses and its certification number, if the laboratory is licensed by the Arizona Department of Health Services;
5. The quality assurance/quality control documentation, including the analytical methods used by the laboratory, method number, detection limits, and any blank, duplicate, and spike sample information necessary to properly interpret the data, if different from that stated in the QAP or SAP;
6. The data reporting unit of measure;
7. Any field notes, laboratory comments, or laboratory notations concerning a deviation from standard procedures, quality control, or quality assurance that affects data reliability, data interpretation, or data validity; and
8. Any other information, such as complete field notes, photographs, climate, or other information related to flow, field conditions, or documented sources of pollutants in the watershed, if requested by the Department for interpreting or validating data.

C. Recordkeeping. The monitoring entity shall maintain all records, including sample results, for the duration of the listing cycle. If a surface water or segment is added to the Planning List or to the 303(d) List, the Department shall coordinate with the monitoring entity to ensure that records are kept for the duration of the listing.

R18-11-603. General Data Interpretation Requirements

A. The Department shall use the following data conventions to interpret data for impaired water identifications and TMDL decisions:

1. Data reported below laboratory detection limits.
   a. When the analytical result is reported as <X, where X is the laboratory detection limit for the analyte and the laboratory detection limit is less than or equal to the surface water quality standard, consider the result as meeting the water quality standard:
      i. Use these statistically derived values in trend analysis, descriptive statistics or modeling if there is sufficient data to support the statistical estimation of values reported as less than the laboratory detection limit; or
      ii. Use one-half of the value of the laboratory detection limit in trend analysis, descriptive statistics, or modeling, if there is insufficient data to support the statistical estimation of values reported as less than the laboratory detection limit.
   b. When the sample value is less than or equal to the laboratory detection limit but the laboratory detection limit is greater than the surface water quality standard, shall not use the result for impaired water identifications or TMDL decisions;
2. Identify the field equipment specifications used for each listing cycle or TMDL developed. A field sample measurement within the manufacturer's specification for accuracy meets surface water quality standards;
3. Resolve a data conflict by considering the factors identified under the weight-of-evidence determination in R18-11-605(B);
4. When multiple samples from a surface water or segment are not spatially or temporally independent, or when lake samples are from multiple depths, use the following resultant value to represent the specific dataset:
   a. The appropriate measure of central tendency for the dataset for:
      i. A pollutant listed in the surface water quality standards 18 A.A.C. 11, Article 1, Appendix A, Table 1, except for nitrate or nitrate/nitrite;
      ii. A chronic water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 2;
      iii. A surface water quality standard for a pollutant that is expressed as an annual or geometric mean;
      iv. The surface water quality standard for temperature or the single sample maximum water quality standard for suspended sediment concentration, nitrogen, and phosphorus in R18-11-109;
      v. The surface water quality standard for radiochemicals in R18-11-109(G); or
      vi. Except for chromium, all single sample maximum water quality standards in R18-11-112.
   b. The maximum value of the dataset for:
      i. The acute water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 2 and acute water quality standard in R18-11-112;
      ii. The surface water quality standard for nitrate or nitrate/nitrite in 18 A.A.C. 11, Article 1, Appendix A, Table 1;
      iii. The single sample maximum water quality standard for bacteria in subsections R18-11-109(A); or
      iv. The 90th percentile water quality standard for nitrogen and phosphorus in R18-11-109(F) and R18-11-112.
   c. The worst case measurement of the dataset for:
      i. Surface water quality standard for dissolved oxygen under R18-11-109(E). For purposes of this subsection, worst case measurement means the minimum value for dissolved oxygen;
      ii. Surface water quality standard for pH under R18-11-109(B). For purposes of this subsection, "worst case measurement" means both the minimum and maximum value for pH.

B. The Department shall not use the following data for placing a surface water or segment on the Planning List, the 303(d) List, or in making a TMDL decision.

1. Any measurement outside the range of possible physical or chemical measurements for the pollutant or measurement equipment,
2. Uncorrected data transcription errors or laboratory errors, and
3. An outlier identified through statistical procedures, where further evaluation determines that the outlier represents a valid measure of water quality but should be excluded from the dataset.

C. The Department may employ fundamental statistical tests if appropriate for the collected data and type of surface water when evaluating a surface water or segment for impairment or in making a TMDL decision. The statistical tests include descriptive statistics, frequency distribution, analysis of variance, correlation analysis, regression analysis, significance testing, and time series analysis.

D. The Department may employ modeling when evaluating a surface water or segment for impairment or in making a TMDL decision, if the method is appropriate for the type of waterbody and the quantity and quality of available data meet the requirements of R18-11-602. Modeling methods include:

a. Better Assessment Science Integrating Source and Nonpoint Sources (BASINS),
b. Fundamental statistics, including regression analysis,
c. Hydrologic Simulation Program-Fortran (HSPF),

d. Spreadsheet modeling, and
e. Hydrologic Engineering Center (HEC) programs developed by the Army Corps of Engineers.

R18-11-604. Types of Surface Waters Placed on the Planning List and 303(d) List

A. The Department shall evaluate, at least every five years, Arizona's surface waters by considering all readily available data.
1. The Department shall place a surface water or segment on:
   a. The Planning List if it meets any of the criteria described in subsection (D), or
   b. The 303(d) List if it meets the criteria for listing described in subsection (E).
2. The Department shall remove a surface water or segment from the Planning List based on the requirements in R18-11-605(E)(1) or from the 303(d) List, based on the requirements in R18-11-605(E)(2).
3. The Department may move surface waters or segments between the Planning List and the 303(d) List based on the criteria established in R18-11-604 and R18-11-605.

B. When placing a surface water or segment on the Planning List or the 303(d) List, the Department shall list the stream reach, derived from EPA's Reach File System or National Hydrography Dataset, or the entire lake, unless the data indicate that only a segment of the stream reach or lake is impaired or not attaining its designated use, in which case, the Department shall describe only that segment for listing.

C. Exceptions. The Department shall not place a surface water or segment on either the Planning List or the 303(d) List if the non-attainment of a surface water quality standard is due to one of the following:
1. Pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of applicable water quality standards;
2. The data were collected within a mixing zone or under a variance or nutrient waiver established in a NPDES or AZPDES permit for the specific parameter and the result does not exceed the alternate discharge limitation established in the permit. The Department may use data collected within these areas for modeling or allocating loads in a TMDL decision; or
3. An activity exempted under R18-11-117, R18-11-118, or a condition exempted under R18-11-119.

D. Planning List.
1. The Department shall:
   a. Use the Planning List to prioritize surface waters for monitoring and evaluation as part of the Department's watershed management approach;
   b. Provide the Planning List to EPA; and
   c. Evaluate each surface water and segment on the Planning List for impairment based on the criteria in R18-11-605(D) to determine the source of the impairment.
2. The Department shall place a surface water or segment on the Planning List based the criteria in R18-11-605(C). The Department may also include a surface water or segment on the Planning List when:
   a. A TMDL is completed for the pollutant and approved by EPA;
   b. The surface water or segment is on the 1998 303(d) List but the dataset used for the listing:
      i. Does not meet the credible data requirements of R18-11-602, or
      ii. Contains insufficient samples to meet the data requirements under R18-11-605(D);
   c. Some monitoring data exist but there are insufficient data to determine whether the surface water or segment is impaired or not attaining, including:
      i. A numeric surface water quality standard is exceeded, but there are not enough samples or sampling events to fulfill the requirements of R18-11-605(D);
      ii. Evidence exists of a narrative standard violation, but the amount of evidence is insufficient, based on narrative implementation procedures and the requirements of R18-11-605(D)(3);
      iii. Existing monitoring data do not meet credible data requirements in R18-11-602; or
      iv. A numeric surface water quality standard is exceeded, but there are not enough sample results above the laboratory detection limit to support statistical analysis as established in R18-11-603(A)(1).
   d. The surface water or segment no longer meets the criteria for impairment based on a change in the applicable surface water quality standard or a designated use approved by EPA under section 303(c)(1) of the Clean Water Act, but insufficient current or original monitoring data exist to determine whether the surface water or segment will meet current surface water quality standards;
   e. Trend analysis using credible and scientifically defensible data indicate that surface water quality standards may be exceeded by the next assessment cycle;
   f. The exceedance of surface water quality standards is due to pollution, but not a pollutant;
   g. Existing data were analyzed using methods with laboratory detection limits above the numeric surface water quality standard but analytical methods with lower laboratory detection limits are available;

h. The surface water or segment is expected to attain its designated use by the next assessment as a result of existing or proposed technology-based effluent limitations or other pollution control requirements under local, state, or federal authority. The appropriate entity shall provide the Department with the following documentation to support placement on the Planning List:
   i. Verification that discharge controls are required and enforceable;
   ii. Controls are specific to the surface water or segment, and pollutant of concern;
   iii. Controls are in place or scheduled for implementation; and
   iv. There are assurances that the controls are sufficient to bring about attainment of water quality standards by the next 303(d) List submission; or

i. The surface water or segment is threatened due to a pollutant and, at the time the Department submits a final 303(d) List to EPA, there are no federal regulations implementing section 303(d) of the Clean Water Act that require threatened waters be included on the list.

E. 303(d) List. The Department shall:

1. Place a surface water or segment on the 303(d) List if the Department determines:
   a. Based on R18-11-605(D), that the surface water or segment is impaired due to a pollutant and that a TMDL decision is necessary; or
   b. That the surface water or segment is threatened due to a pollutant and, at the time the Department submits a final 303(d) List to EPA, there are federal regulations implementing section 303(d) of the Clean Water Act that require threatened waters be included on the list.
2. Provide public notice of the 303(d) List according to the requirements of A.R.S. § 49-232 and submit the 303(d) List according to section 303(d) of the Clean Water Act.

R18-11-605. Evaluating A Surface Water or Segment For Listing and Delisting

A. The Department shall compile and evaluate all reasonably current, credible, and scientifically defensible data to determine whether a surface water or segment is impaired or not attaining.

B. Weight-of-evidence approach.

1. The Department shall consider the following concepts when evaluating data:
   a. Data or information collected during critical conditions may be considered separately from the complete dataset, when the data show that the surface water or segment is impaired or not attaining its designated use during those critical conditions, but attaining its uses during other periods. Critical conditions may include stream flow, seasonal periods, weather conditions, or anthropogenic activities;
   b. Whether the data indicate that the impairment is due to persistent, seasonal, or recurring conditions. If the data do not represent persistent, recurring, or seasonal conditions, the Department may place the surface water or segment on the Planning List;
   c. Higher quality data over lower quality data when making a listing decision. Data quality is established by the reliability, precision, accuracy, and representativeness of the data, based on factors identified in R18-11-602(A) and (B), including monitoring methods, analytical methods, quality control procedures, and the documented field and laboratory quality control information submitted with the data. The Department shall consider the following factors when determining higher quality data:
      i. The age of the measurements. Newer measurements are weighted heavier than older measurements, unless the older measurements are more representative of critical flow conditions;
      ii. Whether the data provide a direct measure of an impact on a designated use. Direct measurements are weighted heavier than measurements of an indicator or surrogate parameter; or
      iii. The amount or frequency of the measurements. More frequent data collection are weighted heavier than nominal datasets.
2. The Department shall evaluate the following factors to determine if the water quality evidence supports a finding that the surface water or segment is impaired or not attaining:
   a. An exceedance of a numeric surface water quality standard based on the criteria in subsections (C)(1), (C)(2), (D)(1), and (D)(2);
   b. An exceedance of a narrative surface water quality standard based on the criteria in subsections (C)(3) and (D)(3);
   c. Additional information that determines whether a water quality standard is exceeded due to a pollutant, suspected pollutant, or naturally occurring condition:
      i. Soil type, geology, hydrology, flow regime, biological community, geomorphology, climate, natural process, and anthropogenic influence in the watershed;
      ii. The characteristics of the pollutant, such as its solubility in water, bioaccumulation potential, sediment sorption potential, or degradation characteristics, to assist in determining which data more accurately indicate the pollutant's presence and potential for causing impairment; and
      iii. Available evidence of direct or toxic impacts on aquatic life, wildlife, or human health, such as fish kills and beach closures, where there is sufficient evidence that these impacts occurred due to water quality condi-

tions in the surface water.

d. Other available water quality information, such as NPDES or AZPDES water quality discharge data, as applicable.

e. If the Department determines that a surface water or segment does not merit listing under numeric water quality standards based on criteria in subsections (C)(1), (C)(2), (D)(1), or (D)(2) for a pollutant, but there is evidence of a narrative standard exceedance in that surface water or segment under subsection (D)(3) as a result of the presence of the same pollutant, the Department shall list the surface water or segment as impaired only when the evidence indicates that the numeric water quality standard is insufficient to protect the designated use of the surface water or segment and the Department justifies the listing based on any of the following:

i. The narrative standard data provide a more direct indication of impairment as supported by professionally prepared and peer-reviewed publications;

ii. Sufficient evidence of impairment exists due to synergistic effects of pollutant combinations or site-specific environmental factors; or

iii. The pollutant is bioaccumulative, relatively insoluble in water, or has other characteristics that indicate it is occurring in the specific surface water or segment at levels below the laboratory detection limits, but at levels sufficient to result in an impairment.

3. The Department may consider a single line of water quality evidence when the evidence is sufficient to demonstrate that the surface water or segment is impaired or not attaining.

C. Planning List.

1. When evaluating a surface water or segment for placement on the Planning List.

a. Consider at least ten spatially or temporally independent samples collected over three or more temporally independent sampling events; and

b. Determine numeric water quality standards exceedances. The Department shall:

i. Place a surface water or segment on the Planning List following subsection (B), if the number of exceedances of a surface water quality standard is greater than or equal to the number listed in Table 1, which provides the number of exceedances that indicate a minimum of a 10 percent exceedance frequency with a minimum of a 80 percent confidence level using a binomial distribution for a given sample size; or

ii. For sample datasets exceeding those shown in Table 1, calculate the number of exceedances using the following equation: $(X \geq x | n, p)$ where n = number of samples; p = exceedance probability of 0.1; x = smallest number of exceedances required for listing with "n" samples; and confidence level ≥ 80 percent.

Table 1.

MINIMUM NUMBER OF SAMPLES EXCEEDING THE NUMERIC STANDARD								
Number of Samples		Number of Samples Exceeding Standard	Number of Samples		Number of Samples Exceeding Standard	Number of Samples		Number of Samples Exceeding Standard
From	To		From	To		From	To	
10	15	3	173	181	22	349	357	41
16	23	4	182	190	23	358	367	42
24	31	5	191	199	24	368	376	43
32	39	6	200	208	25	377	385	44
40	47	7	209	218	26	386	395	45
48	56	8	219	227	27	396	404	46
57	65	9	228	236	28	405	414	47
66	73	10	237	245	29	415	423	48
74	82	11	246	255	30	424	432	49
83	91	12	256	264	31	433	442	50
92	100	13	265	273	32	443	451	51
101	109	14	274	282	33	452	461	52
110	118	15	283	292	34	462	470	53
119	126	16	293	301	35	471	480	54
127	136	17	302	310	36	481	489	55
137	145	18	311	320	37	490	499	56
146	154	19	321	329	38	500		57
155	163	20	330	338	39			
164	172	21	339	348	40			

2. When there are less than ten samples, the Department shall place a surface water or segment on the Planning List following subsection (B), if three or more temporally independent samples exceed the following surface water quality standards:
   a. The surface water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 1, except for nitrate or nitrate/nitrite;
   b. The surface water quality standard for temperature or the single sample maximum water quality standard for suspended sediment concentration, nitrogen, and phosphorus in R18-11-109;
   c. The surface water quality standard for radiochemicals in R18-11-109(G);
   d. The surface water quality standard for dissolved oxygen under R18-11-109(E);
   e. The surface water quality standard for pH under R18-11-109(B); or
   f. The following surface water quality standards in R18-11-112:
      i. Single sample maximum standards for nitrogen and phosphorus,
      ii. All metals except chromium, or
      iii. Turbidity.
3. The Department shall place a surface water or segment on the Planning List if information in subsections (B)(2)(c), (B)(2)(d), and (B)(2)(e) indicates that a narrative water quality standard violation exists, but no narrative implementation procedure required under A.R.S. § 49-232(F) exists to support use of the information for listing.

D. 303(d) List.
1. When evaluating a surface water or segment for placement on the 303(d) List.
   a. Consider at least 20 spatially or temporally independent samples collected over three or more temporally independent sampling events; and
   b. Determine numeric water quality standards exceedances. The Department shall:
      i. Place a surface water or segment on the 303(d) List, following subsection (B), if the number of exceedances of a surface water quality standard is greater than or equal to the number listed in Table 2, which provides the number of exceedances that indicate a minimum of a 10 percent exceedance frequency with a minimum of a 90 percent confidence level using a binomial distribution, for a given sample size; or
      ii. For sample datasets exceeding those shown in Table 2, calculate the number of exceedances using the following equation: $(X \geq x | n, p)$ where n = number of samples; p = exceedance probability of 0.1; x = smallest number of exceedances required for listing with "n" samples; and confidence level ≥ 90 percent.

Table 2.

MINIMUM NUMBER OF SAMPLES EXCEEDING THE NUMERIC STANDARD								
Number of Samples		Number of Samples Exceeding Standard	Number of Samples		Number of Samples Exceeding Standard	Number of Samples		Number of Samples Exceeding Standard
From	To		From	To		From	To	
20	25	5	174	182	24	344	352	43
26	32	6	183	191	25	353	361	44
33	40	7	192	199	26	362	370	45
41	47	8	200	208	27	371	379	46
48	55	9	209	217	28	380	388	47
56	63	10	218	226	29	389	397	48
64	71	11	227	235	30	398	406	49
72	79	12	236	244	31	407	415	50
80	88	13	245	253	32	416	424	51
89	96	14	254	262	33	425	434	52
97	104	15	263	270	34	435	443	53
105	113	16	271	279	35	444	452	54
114	121	17	280	288	36	453	461	55
122	130	18	289	297	37	462	470	56
131	138	19	298	306	38	471	479	57
139	147	20	307	315	39	480	489	58
148	156	21	316	324	40	490	498	59
157	164	22	325	333	41	499	500	60
165	173	23	334	343	42			

2. The Department shall place a surface water or segment on the 303(d) List, following subsection (B) without the required number of samples or numeric water quality standard exceedances under subsection (D)(1), if either the following conditions occur:
   a. More than one temporally independent sample in any consecutive three-year period exceeds the surface water quality standard in:
      i. The acute water quality standard for a pollutant listed in 18 A.A.C. 11, Article 1, Appendix A, Table 2 and the acute water quality standards in R18-11-112;
      ii. The surface water quality standard for nitrate or nitrate/nitrite in 18 A.A.C. 11, Article 1, Appendix A, Table 1; or
      iii. The single sample maximum water quality standard for bacteria in subsections R18-11-109(A).
   b. More than one exceedance of an annual mean, 90th percentile, aquatic and wildlife chronic water quality standard, or a bacteria 30-day geometric mean water quality standard occurs, as specified in R18-11-109, R18-11-110, R18-11-112, or 18 A.A.C. 11, Article 1, Appendix A, Table 2.
3. Narrative water quality standards exceedances. The Department shall place a surface water or segment on the Planning List if the listing requirements are met under A.R.S. § 49-232(F).

E. Removing a surface water, segment, or pollutant from the Planning List or the 303(d) List.
1. Planning List. The Department shall remove a surface water, segment, or pollutant from the Planning List when:
   a. Monitoring activities indicate that:
      i. There is sufficient credible data to determine that the surface water or segment is impaired under subsection (D), in which case the Department shall place the surface water or segment on the 303(d) List. This includes surface waters with an EPA approved TMDL when the Department determines that the TMDL strategy is insufficient for the surface water or segment to attain water quality standards; or
      ii. There is sufficient credible data to determine that the surface water or segment is attaining all designated uses and standards.
   b. All pollutants for the surface water or segment are delisted.
2. 303(d) List. The Department shall:
   a. Remove a pollutant from a surface water or segment from the 303(d) List based on one or more of the following criteria:
      i. The Department developed, and EPA approved, a TMDL for the pollutant;
      ii. The data used for previously listing the surface water or segment under R18-11-605(D) is superseded by more recent credible and scientifically defensible data meeting the requirements of R18-11-602, showing that the surface water or segment meets the applicable numeric or narrative surface water quality standard. When evaluating data to remove a pollutant from the 303(d) List, the monitoring entity shall collect the more recent data under similar hydrologic or climatic conditions as occurred when the samples were taken that indicated impairment, if those conditions still exist;
      iii. The surface water or segment no longer meets the criteria for impairment based on a change in the applicable surface water quality standard or a designated use approved by EPA under section 303(c)(1) of the Clean Water Act;
      iv. The surface water or segment no longer meets the criteria for impairment for the specific narrative water quality standard based on a change in narrative water quality standard implementation procedures;
      v. A re-evaluation of the data indicate that the surface water or segment does not meet the criteria for impairment because of a deficiency in the original analysis; or
      vi. Pollutant loadings from naturally occurring conditions alone are sufficient to cause a violation of applicable water quality standards;
   b. Remove a surface water, segment, or pollutant from the 303(d) List, based on criteria that are no more stringent than the listing criteria under subsection (D);
   c. Remove a surface water or segment from the 303(d) List if all pollutants for the surface water or segment are removed from the list;
   d. Remove a surface water, segment, or pollutant, from the 303(d) List and place it on the Planning List, if:
      i. The surface water, segment or pollutant was on the 1998 303(d) List and the dataset used in the original listing does not meet the credible data requirements under R18-11-602, or contains insufficient samples to meet the data requirements under subsection (D); or
      ii. The monitoring data indicate that the impairment is due to pollution, but not a pollutant.

R18-11-606. TMDL Priority Criteria for 303(d) Listed Surface Waters or Segments

A. In addition to the factors specified in A.R.S. § 49-233(C), the Department shall consider the following when prioritizing an impaired water for development of TMDLs:
1. A change in a water quality standard;
2. The date the surface water or segment was added to the 303(d) List;

3. The presence in a surface water or segment of species listed as threatened or endangered under section 4 of the Endangered Species Act;
4. The complexity of the TMDL;
5. State, federal, and tribal policies and priorities; and
6. The efficiencies of coordinating TMDL development with the Department's surface water monitoring program, the watershed monitoring rotation, or with remedial programs.

B. The Department shall prioritize an impaired surface water or segment for TMDL development based on the factors specified in A.R.S. § 49-233(C) and subsection (A) as follows:

1. Consider an impaired surface water or segment a high priority if:
   a. The listed pollutant poses a substantial threat to the health and safety of humans, aquatic life, or wildlife based on:
      i. The number and type of designated uses impaired;
      ii. The type and extent of risk from the impairment to human health, aquatic life, or wildlife;
      iii. The pollutant causing the impairment, or
      iv. The severity, magnitude, and duration the surface water quality standard was exceeded;
   b. A new or modified individual NPDES or AZPDES permit is sought for a new or modified discharge to the impaired water;
   c. The listed surface water or segment is listed as a unique water in A.A.C. R18-11-112 or is part of an area classified as a "wilderness area," "wild and scenic river," or other federal or state special protection of the water resource;
   d. The listed surface water or segment contains a species listed as threatened or endangered under the federal Endangered Species Act and the presence of the pollutant in the surface water or segment is likely to jeopardize the listed species;
   e. A delay in conducting the TMDL could jeopardize the Department's ability to gather sufficient credible data necessary to develop the TMDL;
   f. There is significant public interest and support for the development of a TMDL;
   g. The surface water or segment has important recreational and economic significance to the public; or
   h. The pollutant is listed for eight years or more.
2. Consider an impaired surface water or segment a medium priority if:
   a. The surface water or segment fails to meet more than one designated use;
   b. The pollutant exceeds more than one surface water quality standard;
   c. A surface water quality standard exceedance is correlated to seasonal conditions caused by natural events, such as storms, weather patterns, or lake turnover;
   d. It will take more than two years for proposed actions in the watershed to result in the surface water attaining applicable water quality standards;
   e. The type of pollutant and other factors relating to the surface water or segment make the TMDL complex; or
   f. The administrative needs of the Department, including TMDL schedule commitments with EPA, permitting requirements, or basin priorities that require completion of the TMDL.
3. Consider an impaired surface water or segment a low priority if:
   a. The Department has formally submitted a proposal to delist the surface water, segment,or pollutant to EPA based on R18-11-605(E)(2). If the Department makes the submission outside the listing process cycle, the change in priority ranking will not be effective until EPA approves the submittal;
   b. The Department has modified, or formally proposed for modification, the designated use or applicable surface water quality standard, resulting in an impaired water no longer being impaired, but the modification has not been approved by EPA;
   c. The surface water or segment is expected to attain surface water quality standards due to any of the following:
      i. Recently instituted treatment levels or best management practices in the drainage area,
      ii. Discharges or activities related to the impairment have ceased, or
      iii. Actions have been taken and controls are in place or scheduled for implementation that will likely to bring the surface water back into compliance;
   d. The surface water or segment is ephemeral or intermittent. The Department shall re-prioritize the surface water or segment if the presence of the pollutant in the listed water poses a threat to the health and safety of humans, aquatic life, or wildlife using the water, or the pollutant is contributing to the impairment of a downstream perennial surface water or segment;
   e. The pollutant poses a low ecological and human health risk;
   f. Insufficient data exist to determine the source of the pollutant load;
   g. The uncertainty of timely coordination with national and international entities concerning international waters;
   h. Naturally occurring conditions are a major contributor to the impairment; and

i. No documentation or effective analytical tools exist to develop a TMDL for the surface water or segment with reasonable accuracy.

C. The Department will target surface waters with high priority factors in subsections (B)(1)(a) through (B)(1)(d) for initiation of TMDLs within two years following EPA approval of the 303(d) List.

D. The Department may shift priority ranking of a surface water or segment for any of the following reasons:

1. A change in federal, state, or tribal policies or priorities that affect resources to complete a TMDL;
2. Resource efficiencies for coordinating TMDL development with other monitoring activities, including the Department's ambient monitoring program that monitors watersheds on a five-year rotational basis;
3. Resource efficiencies for coordinating TMDL development with Department remedial or compliance programs;
4. New information is obtained that will revise whether the surface water or segment is a high priority based on factors in subsection (B); and
5. Reduction or increase in staff or budget involved in the TMDL development.

E. The Department may complete a TMDL initiated before July 12, 2002 for a surface water or segment that was listed as impaired on the 1998 303(d) List but does not qualify for listing under the criteria in R18-11-605, if:

1. The TMDL investigation establishes that the water quality standard is not being met and the allocation of loads is expected to bring the surface water into compliance with standards,
2. The Department estimates that more than 50 percent of the cost of completing the TMDL has been spent,
3. There is community involvement and interest in completing the TMDL, or
4. The TMDL is included within an EPA-approved state workplan initiated before July 12, 2002.